VOLUME I

HAZARDOUS WASTE CLOSURE REPORT

HAZARDOUS WASTE REMOVAL, DECONTAMINATION AND INTEGRITY ASSESSMENT OF THE REGULATED UNITS

FORMER ENVIRITE CORPORATION HAZARDOUS WASTE FACILITY
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT

Prepared for:
ENVIRITE CORPORATION
Formerly Pure-Etch of Connecticut, Inc.
U.S. EPA IDENTIFICATION NO. CTD093616613
CT DEP / HWM-140-024
Thomaston, CT

URS Project No.: 36935792.10010

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1.0 INTRODUCTION

1.1 Scope and Purpose of RCRA Facility Closure

This Closure Report documents the hazardous waste closure process of the former Envirite Corporation hazardous waste facility (the "facility"). The hazardous waste closure process for the facility was conducted in accordance with the Facility Closure Plan dated July 1994 (Rev. 2B) that was incorporated with the "Final Permit" prepared by Envirite Corporation. The facility Closure Plan is identified as "Attachment C" of the Resource Conservation and Recovery Act (RCRA) Part B operating permit under Permit No. DEP/HWM-140-024 and was approved by the U.S. Environmental Protection Agency (USEPA) and Connecticut Department of Environmental Protection (CTDEP). Closure activities have been subject to the RCRA Hazardous Waste Management regulations (40 CFR Part 264 Subpart G), R.C.S.A. §22a-449(c)-104 and C.G.S. §22a-454(a) which include by reference the "RCRA Closure Plan Guidance for Container Storage Areas and Tank Systems" (Draft November 1993) prepared by the CTDEP. Copies of the Facility Closure Plan and CTDEP closure guidance are included in **Appendix A.**

The regulatory closure process conducted at the Envirite facility involved two major parts. The first part involved removal of hazardous waste and decontamination of facility structures (i.e., tanks, pipes, trenches and floor surfaces). The second part involved the characterization and remediation of potential contamination from releases of hazardous waste to the environment (i.e., soil) through pathways such as cracks or joints in the concrete trenches or floors or historical spills breaching secondary containment units. The second part of work of the closure process was intended to determine and characterize the presence or absence of contamination in surrounding soil directly associated with the regulated units undergoing closure. This effort involved conducting integrity assessments of the containment areas and trench units to identify cracks and joints and conduct soil sampling beneath these areas. If analyses determined detection of releases greater than media closure criteria (MCC)[1] below these cracks and joints within these areas, the extent of contamination would have been further evaluated.

The Closure Plan process was managed by URS Corporation AES (URS) on behalf of Envirite Corporation. Mr. Gary P. Alicandro, CHMM, LEP was assigned as the Project Manager and "Authorized Agent" for Envirite in matters regarding waste profiling manifest certifications. URS services included oversight of site contractors, sampling and recordkeeping tasks.

1.2 Facility Location and Description

The subject property is located in the northwestern area of Connecticut at 198 Old Waterbury

[1] Applicable media closure criteria are the Industrial/Commercial Direct Exposure Criteria of the Connecticut Department of Environmental Protection Remediation Standard Regulations (RSRs).

Road in the Town of Thomaston, Connecticut approximately 1- mile south of Exit 38 of Interstate Route 8 and ½ mile south of the intersection of Reynolds Bridge Road and Waterbury Road as identified on **Figure 1**.[2]

The facility subject to closure consists of a rectangular shaped main building constructed with steel-frame members and corrugated siding on a concrete slab measuring 120- feet by 100- feet with a total area of 12,000 square feet. A masonry constructed office building frontage measuring 30- feet by 86- feet exists on the western side of the main plant along the Old Waterbury Road. Two small steel-framed building structures measuring 10- feet by 20- feet exist on the southside of the main building adjacent to an overhead door access to the main building. The main building houses the Regulated Units consisting of various inactive aboveground storage tanks and related ancillary piping network, containment system consisting of concrete berms and trenches and former container management areas that are subject to the RCRA closure process. The building is surrounded by a bituminous asphalt pavement area with a north and south gate access to Old Waterbury Road. Various inactive aboveground nonhazardous tanks formerly used for process treatment exist along the west and north building wall.[3] The bituminous asphalt pavement area is surrounded by a closed landfill which is not part of the facility closure process. These areas are shown on **Figure 2**.

The facility property is protected by a chain-linked fence enclosure. The property is bordered on the north by undeveloped land, on the east by Old Waterbury Road and the Naugatuck River, on the west by Interstate Route 8 and Branch Brook, and south by land owned by the Town of Thomaston that includes the wastewater treatment facility and dog control facility.

1.3 Facility Regulated Areas Subject to Closure

The Closure Plan process managed by URS addressed the following six (6) Regulated Units identified in the RCRA Part B permit. These include the following facility waste management and processing areas identified on **Figure 3**:

1. **Alkaline Processing and Storage Tank Area.**
2. **Acid Storage Area.**
3. **Acid Unloading Pad.**
4. **Container Unloading/Decanting/Washing Area.**
5. **Container Management Area No. 1.**
6. **Container Management Area No. 2.**

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[2] The subject property location coordinates on the U.S. Geological Survey Quadrangle Map include 41° 38′ 48″ North Latitude and 73° 04′ 46″ West Longitude (NAD 1927). UTM coordinates are Easting 659931mE and Northing 4612318mN.

[3] Aboveground tanks formerly used for process treatment exist along the west and north building wall include a CO_2 tank, lime silo tank and anhydrous ammonia tank which has been removed by the vendor.

Facility information depicting process flow schematics of tank and pipe configurations are included in **Appendix B**.

1.4 Facility Processes and Waste Management

Based on review of facility operating records and process flow schematics, waste management processes and types were identified for specific Regulated Units. These are identified in Table 1-1 below:

Table 1-1. Facility Waste Management Processes.

REGULATED UNITS	WASTE MANAGEMENT TYPES
ALKALINE STORAGE TANK AND PROCESSING AREA	Waste alkaline corrosives and waste solutions of copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, cyanide and metals (lead, copper, chromium, zinc, and nickel).
ACID STORAGE TANK AREA	Waste acids, waste metal solutions (lead, copper, chromium, zinc, and nickel), spent cupric chloride etchant and waste hydrochloric acid.
ACID UNLOADING AREA	Waste acids, waste metal solutions (lead, copper, chromium, zinc, and nickel), spent cupric chloride etchant and waste hydrochloric acid.
CONTAINER UNLOADING DECANTING WASHING AREA	Waste acids, waste alkaline corrosives and waste metal hydroxides (lead, copper, chromium, zinc, and nickel) including spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide and sodium hydroxide.
CONTAINER MANAGEMENT AREAS #1 AND #2	Waste acids, waste alkaline corrosives and metal hydroxides (lead, copper, chromium, zinc, and nickel) including spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide and sodium hydroxide.

1.5 Closure Process Implementation

Implementation of hazardous waste closure activities was initiated in early 2002 by Pure-Etch Company of Connecticut, Inc. (Pure-Etch) pursuant to the letter dated October 4, 2001 and December 10, 2001 from the CTDEP Waste Management Bureau. Following a review of the USEPA/CTDEP approved Closure Plan and the CTDEP Guidance Document on December 26, 2001, Pure-Etch submitted to the CTDEP a recommended approach and preliminary timeline for closure implementation of the Pure-Etch facility and received a response from the Department on March 20, 2002. The CTDEP concurred with the submitted closure outline and requested that certain items be addressed when preparing the updated Site Characterization Work Plan. This Work Plan is part of the closure implementation process submitted to the CTDEP by URS in February 2002 and incorporates comments from the CTDEP in their letter dated March 20, 2002 including various subsequent communications and field meeting in 2002 and 2003. Following transfer of the property, Envirite Corporation resumed implementation of the closure process in late 2004 completed remaining activities in 2006.

Decontamination of the "regulated units" as identified in the Closure Plan subject to the closure

process was completed in August 2006. Closure work included removal of waste and decontamination from nineteen (19) process tanks and ten (10) floor surface areas, cleanup of the filter press area, removal of large quantities of laboratory chemicals, removal of various chemical drums and cleanup of six (6) trench drain and sump units throughout the facility. In addition, related management tasks included work plans, six (6) closure plan amendments, contractor inspections and laboratory analyses to characterize waste types and collect confirmation data after cleanup. The removal of waste (tank contents, laboratory chemicals, trench liquids and chemical drums) and decontamination of structures (i.e., tanks, pipes, trenches and floors) was the first part of the closure process completed under the previously prepared Envirite Closure Plan (1996).

1.6 Closure Plan Amendments

The Site Characterization Work Plan was updated and incorporated through the series of Closure Plan Amendments prepared by URS on behalf of Pure-Etch and Envirite. Based on review of facility records, facility process information has been incorporated into the sampling and analysis plan sections. The Closure Plan (1994) was updated and implemented as a series of six (6) site-specific Closure Plan Amendments for the Regulated Units as identified in Table 1-2 below:

Table 1-2. Completed Closure Plan Amendments.

Closure Plan	Summary Description of Completed Closure Activities
Amendment No. 1 06-10-2002	**Alkaline Storage and Processing Area.** Removal of 4 unused vertical process tanks NK-1, CR-1, ER-1 and SR-1; tanks were purchased new by Pure-Etch in June 1994 but not activated into service; tanks and associated ancillary piping networks were washed, rinsed and wiped sampled to verify the absence of constituents; upon analytical verification; tanks and pipes were acquired, dismantled and removed from the facility in August 2002.
Amendment No. 2 09-19-2002	**Container Management Areas and Laboratory Chemicals.** Removal of the hazardous waste container inventory within the regulated areas and laboratories. Work activities included: container inventory inspections of the process and laboratory areas, waste material sampling and laboratory analyses, chemical identification and regulatory characterization, container re-packaging, container marking and labeling, consolidation, staging, transportation and disposal.
Amendment No. 3 08-09-2002	**Alkaline Process and Storage Tanks.** Decontamination of tank and pipe systems in the Alkaline Processing and Storage Area. Work activities included: eight (8) fiberglass reinforced plastic tanks process tanks including the piping system network identified as T-15, E-2, E-1, ER-2, D-1, S-2, S-1, and VC-2.
Amendment No. 4 12-20-2002	**Acid Storage Tanks, Support Legs & Acid Unloading Pad.** Decontamination of tank shells, support legs and pipe systems in the Acid Storage Area. Work activities included Tanks WT-4, B-1, C-1, VC-1, WT-1, WT-2, WT-3 and EH. This work also included decontamination of the Filter Press located adjacent to this area.

Closure Plan	Summary Description of Completed Closure Activities
Amendment No. 5 02-20-2003	**Trench Containment Systems, Laboratory & Container Processing Areas.** Decontamination of containment and surface floors within the facility. Work activities included: removal of liquid waste from the trench systems which served as part of the containment structures for the regulated units within the facility and decontamination of the Trench Containment Systems of all Regulated Units, Container Management Area #1, Container Management Area #2, Container Unloading/Decanting/Washing Area, Waste Testing Laboratory and Plant Control Laboratory.
Amendment No. 6 04-2002 08-2002 11-2005	**Updated Site Characterization Work Plan – Integrity Assessment.** Characterization of sub-slab soil in the upper 12-inches of the soil underlying the concrete floor for the regulated units where containers and tanks have been in use. Work activities included detailed integrity assessments of the concrete floor and containment systems after floor sweeps and washdowns to identify structural cracks and joints followed by concrete coring through potential migration pathways to inspect the concrete core and collect sub-slab soil samples for laboratory analyses for constituents of concern.

1.7 Decontamination Methods and Management of Wastewater

The tanks and associated ancillary piping networks were rinsed and sampled to verify the absence of hazardous constituents. Decontamination steps included the sequences of initial washes and final rinses. Rinse water was collected and temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results. Decontamination sequences included inspections of tank interiors from open manway ports to identify visual evidence of chemical residues. Upon determination that residues were absent, tanks and associated ancillary piping networks were final rinsed and sampled to verify the absence of hazardous constituents. Decontamination steps included the following sequences:

- Initial Wash Sequence. The interior of the tanks and piping networks and concrete floor surfaces were initially pressure-washed with a dilute chemical solution (approximately 2 to 3%) of an anionic detergent cleaning agent to remove surface deposits and prevent redeposition of any contaminants. A secondary pressure wash rinse consisting of clean water was applied to flush detergent residue through the system. Wash water (WW) rinseate was collected and temporarily stored in portable skid-mounted tanks.

- Final Rinse Sequence. The interior of the tanks and piping networks and concrete floor surfaces were pressure-rinsed with clean water. Rinse water (RW) was collected and temporarily stored in portable skid-mounted tanks. Prior to transfer of wastewater to the temporary holding tanks, wastewater discharge samples were collected through a dedicated manifold sampling port connected to the discharge port.

Generated wastewater was shipped off-site within 90 days of accumulation. Wastewater in contact with regulated units prior to decontamination was managed as a RCRA hazardous waste (EPA HW Identification No. F006). Wastewater collected after washing surfaces or analytical results indicating the absence of contaminants of concern was managed as a Connecticut Regulated Waste (CR-04).

1.8 Sampling and Laboratory Analysis Plan

A sampling plan was prepared for the purpose of evaluating effectiveness of the tank and piping system decontamination. Sampling and analytical procedures were based on guidance protocols established by the CT DEP.[4] Analytical parameters were selected based on the known processes and subsequent constituents of concern listed in Table 1-3.

1.8.1 Identification of Constituents of Concern

Based on review of records, the constituents of concern (COCs) were identified for potential areas of concern associated with specific Regulated Units. These are below:

Table 1-3. Constituents of Concern.

REGULATED UNIT	REGULATED UNIT COCs
Acid Storage Area - Tanks ST1, WT4, B1, VC1, C1, WT1, WT2, WT3 and Secondary Containment Trench	Waste acids, metals (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, and petroleum hydrocarbons.
Acid Unloading Area – Concrete Pad and Pipe Connection to Secondary Containment Trench	Waste acids, metals (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, and petroleum hydrocarbons.
Alkaline Storage and Processing Area – Tanks NK1, CR1, ER1, SR1, E2, E1, ER2, D1, S2, S1 and VC2 and Secondary Containment Trench	Waste alkaline corrosives, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, cyanide, metals (lead, copper, chromium, zinc, nickel), and petroleum hydrocarbons.
Container Management Area #1 and Secondary Containment Trench	Waste acids, waste alkaline corrosives, metal hydroxides (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, and petroleum hydrocarbons.
Container Unloading/Decanting/Washing Area and Secondary Containment Trench	Waste acids, waste alkaline corrosives, metal hydroxides (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, and petroleum hydrocarbons.

[4] Connecticut Department of Environmental Protection, Waste Engineering and Enforcement Division, Waste Management Bureau, RCRA Closure Plan Guidance – Container Storage Areas and Tank System, Draft November 1993.

REGULATED UNIT	REGULATED UNIT COCs
Former Alkaline Unloading Area, Pipe Connections and Inlet Discharge Pipe to Secondary Containment Trench	Waste alkaline corrosives, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, metals (lead, copper, chromium, zinc, nickel), and petroleum hydrocarbons.

1.8.2 Sample Identification System

Immediately following sample collection, an adhesive label was affixed to each sample container for identification purposes. Each sample was labeled with the site prefix, then numbered sequentially. Sample labels also included date, time of sample collection, sampler initials, site name, and laboratory analytical method. Pertinent sample information was recorded on a laboratory chain of custody form.

A system of sample identification was devised to track the series of sample collection and laboratory analyses. The system was based on organizing samples on the basis of data quality objectives, source location and use. These enhanced the consistency of data comparison in sets that were derived over the duration of the project. Samples were numbered sequentially within the appropriate tracking set. These are identified in Table 1-4 below:

Table 1-4. Sample Serial Tracking System.

SERIAL NUMBER SET	SAMPLE SOURCE LOCATIONS
100 Series	**CONCRETE SLAB and TRENCH NETWORK** Unknown solid residues on the concrete slab, standing liquid in trenches, bottom sediment deposits within the trench and sump containment structures. Collected during initial site characterization and inspections of the concrete floor surface and trench containment systems to characterize contaminants of concern, evaluate the presence of hazardous conditions prior to implementing decontamination procedures and prepare RCRA waste determinations.
200 Series	**ACID and ALKALINE TANK and PIPE SYSTEMS** Unknown solid precipitates or liquid residues within tank and pipe systems, wastes derived during decontamination sequences and confirmation rinsewater and wipe samples. Collected during site characterization to evaluate the presence of hazardous conditions prior to implementing decontamination procedures, evaluate effectiveness of decontamination and prepare RCRA waste determinations.
300 Series	**CONCRETE SLAB SURFACES of REGULATED UNITS** Concrete chip samples from regulated units to determine effectiveness of decontamination within the acid, alkaline and container management areas including trenches.
400 Series	**ACID STORAGE TANK AREA** Confirmation wipe samples collected from acid tank interiors and storage tank leg supports.

SERIAL NUMBER SET	SAMPLE SOURCE LOCATIONS
500 Series	**CONCRETE SLAB SUBSURFACE SOIL of REGULATED UNITS** Subsoil samples collected during the Integrity Assessment within the upper 18-inches of soil below concrete floor cracks or structural joints.

The complete Laboratory Sample Tracking Log is included as **Appendix F**. This table includes a complete log of samples collected during the closure process, sample collection data, URS serial sample number, sample source location, sample matrix, laboratory report number and analytical parameters. A reference table listing sample abbreviations is included at the end of the table.

1.8.3 Sample Collection Methods

a. Tank, Pipe and Trench Contents Sampling Procedures

During the initial site characterization and visual inspections of the interconnected network of pipes with tanks and trench containment system, representative samples were collected to analytically characterize contaminants of concern to evaluate the presence of hazardous conditions prior to implementing decontamination procedures. Wastes included unknown solid precipitates or liquid residues within the tank and pipe systems and standing wastewater and bottom sediment deposits within the trench and sump containment structures. Analytical data was evaluated to determine the special measures to mitigate hazards during decontamination for purposes of regulatory waste determinations and completion of waste material profiles for disposal facility review and acceptance.

Composite liquid waste sampling ("COLIWASA") devices were utilized to collect representative samples from tanks, pipes and trench containment units.

b. Wastewater Sampling Procedures

Prior to transfer of wastewater to the temporary holding tanks for each tank, wash water (WW) and rinse water (RW) wastewater samples were collected through a dedicated manifold sampling port connected to the discharge port. Samples were collected with a pre-cleaned sampler and placed in pre-cleaned, method specific glass jars provided by the contract laboratory. Prior to use, and between samples, the sampler was decontaminated using water wash to remove gross contamination, anionic detergent wash and distilled water rinse. Gloves were changed between each sample location to prevent cross contamination. Following sample collection, containers were labeled with the identification number, date, time of collection, sample collector initials, site name and laboratory analytical method. Pertinent sample information was recorded on a laboratory chain of custody and shipped to the contract laboratory.

Wash and rinse wastewater was collected and temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results. When analytical results indicated the presence

of hazardous constituent residues was not detected, the last analytical laboratory report was accepted. Upon verification that the cleaning sequences for the project area were completed, generated wastewater was shipped off-site for treatment and disposal at a permitted facility.

c. Wipe Sampling Procedures

Tank and piping interiors were classified as "non-porous materials". Representative wipe (W) samples were collected from the internal surface of each tank and pipe section using cotton gauze saturated with a dilute solution of nitric acid (1:4 nitric acid to deionized water). The saturated gauze was wiped over selected internal surface areas for each tank and pipe system in adequate numbers to assure representative characterization of the sidewalls and bottom dish of the tanks.[5] The sample frequency is referenced in Table 1-5 below:

Table 1-5. Sampling Plan for Tank and Pipe Wipe Samples.

Mechanical Unit	Internal Sample Location	Minimum Number of Samples
Vertical Tank	Tank Shell Sidewall Interior	2
	Tank Bottom Dish Interior	1
Pipe System	Pipe End Interior	2
	Per 10-foot Pipe Section	1

The following protocols were referenced to establish a protocol consistent with the CTDEP RCRA Closure Plan Guidance (1993) included in **Appendix A** which included the following documents:

- Attachment A – Wipe Sampling Procedure.
- Attachment C – Sampling and Analysis Guidance, Table 1-9, Post-Decontamination Sampling of Tanks and Secondary Containment Structures which are Constructed of Non-Porous Material.

The following procedures were used to sample non-porous material surfaces to verify that media closure criteria had been achieved after decontamination or inventory removal had been completed:

- Selection of ¼ square meter (50 by 50 centimeters) area on the equipment or structure

[5] Determination of an appropriate sampling area is a subjective procedure. A determination of sampling a non-porous surface areas is a function of concentration units of applicable regulatory media closure criteria, data quality objectives, laboratory methods and sample material, location and access of the structure (vertical tank, horizontal tank, pipe, metal storage rack, etc.) as it relates to safety and ability of collect representative samples, dimension and shape of the structural member, levels of visible dust or chemical residue and contaminated condition of the structure (i.e., collection of a sample before, interval sampling between decontamination sequences or confirmatory sampling to evaluate effectiveness of decontamination methods).

tested using a flexible disposable template to outline the target sample surface area;

- Application of a cotton gauze saturated with an appropriate solvent solution* over the entire sampling area repeatedly in the vertical direction and then turning the gauze over and wiping repeatedly in the horizontal direction.

*Note: Gauze solutions are based on the specific constituent of concern and corresponding laboratory method. These include the following: Methanol for Volatiles; Hexane-Acetone mix (1:1), or Methylene Chloride for Semi-Volatiles; Hexane for PCBs; dilute Nitric Acid (1:4 Nitric Acid to deionized water) for metals; and dilute Sodium Hydroxide for Cyanide.

Units are expressed in micrograms Absolute (µg Abs) for ¼-inch surface area using a 5-centimeter diameter gauze wipe.

Immediately following sample collection, each gauze was placed in a Teflon-sealed container with a affixed adhesive label for identification purposes and submitted for laboratory analysis.

d. Concrete Chip Sampling Procedures

Concrete is considered a "porous material." Concrete chips were collected from coated and uncoated concrete surface structures. These areas included the containment berm, entrance ramps, containment floor, trench unit or sump collection pit. Concrete chip samples were collected during the closure verification process to document decontamination effectiveness. Concrete chip samples were collected from areas where wastes were formerly stored on concrete structures. Samples were collected from the upper ¼ -inch surface below the coated surface. The following procedure was used to sample porous material to verify that MCC had been achieved after decontamination or removal was completed:

- Selection of an area based on location of waste storage, signs of releases, cracks, joints or downgradient flow drainage of potential container or tank leaks or spills.
- Delineation of a 4.25-inch by 4.25-inch surface area to yield an approximate 100 gram sample quantity based on an assumed chisel penetration depth of 1/8-inches.
- Collection of the concrete aggregate using a pre-cleaned sampler into a pre-cleaned, method specific glass jars provided by the contract laboratory. Prior to sample collection, the chisel sampler was decontaminated using tap water wash to remove gross contamination followed by an Alconox® detergent wash and distilled water rinse.

Immediately following sample collection, an adhesive label was affixed to each sample container for identification purposes.

1.8.4 Analytical Laboratory Methods

a. Wastewater Samples

Analytical data were evaluated to determine whether further wash/rinse sequence actions were required. Parameters were limited to constituents of concern and were subjected to 24-hour laboratory turnaround times. Method analyses for constituents of concern or chemical properties included:

- Total Mass for RCRA 8 Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) including the addition of Copper, Nickel, Zinc and Iron (EPA Methods 200.7, 6010B and 7441A for Mercury only);
- Total Cyanide (CN) by EPA Method 335.2/9010B;
- Volatile Organic Compounds (VOCs) by EPA Method 8260B (GC/MS);
- Corrosivity (pH) by EPA Method 150.1; and
- Total Organic Carbon (TOC) by EPA Method 415.1.

b. Wipe Samples

Analytical data were evaluated to determine whether further wash/rinse actions were required. Parameters were limited to constituents of concern and subjected to 24-hour laboratory turnaround times for the following parameters:

- Total Mass for RCRA 8 Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) including the addition of Copper, Nickel, Zinc and Iron by EPA Methods 200.7, 6010B and 7441A for Mercury; and
- Total Cyanide (CN) by EPA Method 335.2/9010B.

c. Concrete Chip Samples

Analytical data were evaluated to determine whether further wash/rinse actions were required. Parameters were limited to constituents of concern for the following parameters:

- Total Mass for RCRA 8 Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) including the addition of Copper, Nickel, Zinc and Iron by EPA Methods 200.7, 6010B and 7441A for Mercury;
- Total Cyanide (CN) by EPA Method 335.2/9010B; and
- Extractable Total Petroleum Hydrocarbons by CT DEP ETPH Method.

1.8.5 Quality Assurance and Quality Control Plan

a. Wastewater Samples

For quality assurance and quality control purposes, the following supplemental samples were collected and submitted for laboratory analysis for constituents of concern to document decontamination effectiveness during the closure verification process:

- One (1) pre-rinse blank per day, consisting of clean rinsewater (CW) before use for each tank;
- One (1) rinse blank per day, consisting of deionized water rinsed across a decontaminated sampler or structure;
- One (1) trip blank per day, prepared by the laboratory for volatile organic compound analyses; and

- One (1) blind field duplicate, collected randomly at a frequency of one every ten (10) discrete samples co-located with known confirmation samples.

b. Wipe Samples

For quality assurance and quality control purposes, the following supplemental samples were collected during the closure verification process to document decontamination effectiveness:

- One (1) pre-rinse blank per day, consisting of a saturated gauze before use for each tank; and
- One (1) blind field duplicate, collected randomly at a frequency of one every ten (10) discrete wipe samples, co-located with known confirmation samples.

c. Concrete Chip Samples

For quality assurance and quality control purposes, the following supplemental samples were collected during the closure verification process to document decontamination effectiveness:

- One (1) blind field replicate, collected randomly at a frequency of one every ten (10) discrete samples, is submitted for laboratory analysis for constituents of concern. Blind field replicates are co-located with known samples.

1.9 Health and Safety Management Program

1.9.1 Standard Health and Safety Practices

Health and safety practices were followed in accordance with U.S. EPA Regulation 40 CFR 300.150 and OSHA Standard 29 CFR 1910.120. Specific control measures and procedures included the following:

- Preparation of a Health & Safety Plan with special reference to Personal Protective Equipment, Confined Space Entry, Hot Work Permit, Control of Hazardous Energy (Lockout/Tagout) and use of Powered Hand Tools;
- Implementation of an air monitoring program to monitor for emissions of air-borne particulate matter, combustion engine emissions or nuisance dusts;
- Implementation of health and safety requirements for site personnel in accordance with OSHA 29 CFR 1910.120 including use of support zones, contamination-reduction zone and exclusion zones within the project work limits, personal protective equipment for Levels D and C, as appropriate, and site security through use of access control;
- Implementation of measures to control dust, control of vehicle access and limiting disturbance areas; and
- Implementation of standard decontamination procedures for personnel, equipment and vehicles to control and contain the translocation of contaminants.

The use of PPE conformed to OSHA and ANSI Standards at protection levels commensurate with the type and concentrations of chemicals present or anticipated. During active work, appropriate

levels of PPE adhered to the following minimum guidelines listed in Table 1-6 below:

Table 1-6. Minimum Levels of Personal Protection Equipment.

Work Area	Minimum Levels of PPE	Description
Support Zone	• Orange Safety Vest.	• Field Office area. • Staging areas.
Contamination Reduction Zone	• Hard hat. • Safety Glasses. • Steel-Toed Boots. • Orange Safety Vest.	• Facility areas used for inspections or observations.
Exclusion Zone	• Hard hat. • Safety Glasses. • Steel-Toed Boots. • Orange Safety Vest. • Chemical/Fire Protective Clothing.	• Work removal areas within the tank storage area.

Decontamination of site workers was conducted prior to egress of personnel from the exclusion zones through a decontamination corridor. A modified annex for "Level D" or "Level C" was used with stations consisting of disposal of personal protective equipment and chemical protective clothing, wash basins and final rinse basins. Decontamination procedures for construction support equipment and transporting vehicles was performed to assure effective decontamination of equipment prior to leaving the project limits. Methods included the physical removal of trapped debris, low-pressure water spray, and wiping.

1.9.2 Site Work Zone Management Controls

For purposes of maintaining work zone control of site activities, assuring site security and preventing the translocation of contaminants, various work zones were planned for access into and within the facility. Access control points were designated for controlling and monitoring traffic into the facility. Vehicles and personnel entering the facility were required to sign-in at the URS Field Trailer and then directed to specific work zones following delineated access areas. The Work Limit Control Line was the contamination control line that encompassed the removal activities. Removal actions, other than low impact activities in the Support Zones were not permitted in areas outside the control line which served as a buffer area to prevent facility disturbance in areas of the facility not subject to closure activities. Main access into the facility was restricted to the southern overhead door and laboratory entrance door. The central aisle corridor within the facility served as the decontamination-reduction zone beginning at the southern overhead door to the north wall. The work areas around the Regulated Unit areas were designated as the Exclusion Zones. Work zones were delineated on **Figure 4-1**, **Figure 4-2**, **Figure 4-3**, **Figure 4-4** and **Figure 4-5**.

2.0 AMENDMENT No. 1 – PURE-ETCH ALKALINE REACTOR TANKS

2.1 Dismantling and Removal of Tanks NK-1, CR-1, ER-1 and SR-1

Closure Plan Amendment No. 1 of the facility RCRA closure process involved the decontamination, dismantling and removal of alkaline process tanks installed by Pure-Etch within the **Alkaline Processing and Storage Tank Area**. These tanks were not installed or used by Envirite but originally purchased new by Pure-Etch in June 1994 and not activated into service.[6] Though not used, Pure-Etch decided to adhere to standard closure plan practices of verifying the status of each reactor tank before dismantling. Accordingly, the tanks and associated ancillary piping networks were rinsed and sampled to verify the absence of hazardous constituents. The tanks were decontaminated and verified for effectiveness by analyses of final rinse water and wipe tests of the inner tank shell surfaces following standard protocols established in the Closure Plan. Upon analytical verification of removal of hazardous constituents, the tanks were dismantled and removed from the facility.

2.2 Location and Description of Reactor Tanks NK-1, CR-1, ER-1 and SR-1

The four (4) process tanks identified as NK-1, CR-1, ER-1 and SR-1 (the "tanks") were fiberglass reinforced plastic tanks purchased by Pure-Etch as part of a planned process modification which were not activated into service. These process tanks were located in the Alkaline Storage and Processing Area adjacent to the central aisle of the facility along the concrete berm structure. Locations of the tanks are identified on **Figure 4-1**. Specifications of the tanks are included in Table 2-1 below:

Table 2-1. Pure-Etch Tank Specifications.

SPECIFICATION	DIMENSION
Construction	Vertical Filament Wound Fiberglass Reinforced Plastic Tanks with Dished Bottoms, Domed Tops, Full Circumferential Support Skirts and 24-inch diameter flanged fiberglass manway ports with neoprene gasket bolts.
Design Capacity	7,553 Gallons (Capacity per 1 Foot Depth - 587.52 Gallons)
Total Height / Diameter	17 feet – 3 inches / 10 feet – 0 inches
Shell Height / Skirt Height	11 feet – 9 inches / 3-feet – 0 inches
Weight	4,000 Pounds

[6] Method and materials of construction are shown for reference only in the attached site plan entitled, Pure-Etch Reactor Vessel ER-1, SR-1, CR-1, NK-1. Drawn by Fiberglass Repres., Inc., Drawing No. D-63660-1, Rev. 2, Job Number 63660, 6-17-94. URS makes no representation as to the accuracy of the plan. This plan is included for reference only and has not been field verified by URS.

2.3 Decontamination Procedures and Waste Disposal

2.3.1 Initial Wash and Final Rinse Sequences

Visual inspections of the tank interiors on July 22, 2002 indicated no evidence of chemical residues. Furthermore, because the tanks were not activated, hazardous wastes were not processed through the tank and pipe systems. Therefore, the tanks were not technically contaminated with hazardous wastes. However, the tanks and associated ancillary piping networks were tripled-rinsed and sampled to verify the absence of hazardous constituents as described in Section 1.7. Tank system dismantling was performed from July 23, 2002 to August 13, 2002. The tanks were removed from the facility on August 14, 2002.

2.3.2 Management and Disposal of Wastewater

Rinse water was collected and temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results. Analytical results from samples collected on July 22, 2002 indicated no concentrations of hazardous constituent residues and, therefore, additional wash sequences were not required. Upon verification that the cleaning sequences were completed, generated wastewater was shipped off-site on August 28, 2002 for treatment and disposal at a permitted facility. A summary of the shipment is provided in Table 2-2 below. The shipment record is included in **Appendix D**.

Table 2-2. Shipment Record - Pure-Etch Alkaline Process Tanks NK-1, CR-1, ER-1 and SR-1.

Shipment No.	Date of Shipment	Quantity
4	08/29/2002	3,000 Gallons

2.4 Sampling and Laboratory Analysis Plan

A sampling plan was prepared for the purpose of evaluating effectiveness of the tank and piping system decontamination. Sampling and analytical procedures were based on guidance protocols established by the CT DEP Protocols as described in Section 1.8 were followed.

2.5 Analytical Laboratory Results of Tank and Pipe Samples

2.5.1 Sample Identification

Wastewater samples were collected during the closure verification process to document decontamination effectiveness. Wipe samples were also collected from the internal surface of each tank and pipe section to document decontamination effectiveness. These locations are listed in Table 2-2 below and identified on **Figure 5-2**.

Table 2-2. Sample Point Identification.

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
1	07/22/02	**PE-201**	Water Tank Tote	CW	A-L0207260-01
2	07/22/02	**PE-202**	Tank NK-1	RW	A-L0207260-02
3	07/22/02	**PE-203**	Tank SR-1	RW	A-L0207260-03
4	07/22/02	**PE-204**	Tank ER-1	RW	A-L0207260-04
5	07/22/02	**PE-205**	Tank CR-1	RW	A-L0207260-05
6	07/22/02	**PE-206**	Water Tank Tote	WW	A-L0207260-06
7	07/22/02	**PE-TB**	Trip Blank	TB	A-L0207260-07
8	07/23/02	**PE-207**	Tank NK-1	W	A-L0207260-08
9	07/23/02	**PE-208**	Tank CR-1	W	A-L0207260-09
10	07/23/02	**PE-209**	Tank CR-1(dup)	W	A-L0207260-10
11	07/23/02	**PE-210**	Tank ER-1	W	A-L0207260-11
12	07/23/02	**PE-211**	Tank SR-1	W	A-L0207260-12
13	07/23/02	**PE-212**	PIPES	W	A-L0207260-13
14	07/23/02	**PE-213**	Equip. Wipe Bank	W	A-L0207260-14

2.5.2 Wastewater Samples

Analytical results of wash water and rinse water samples were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G -Table 2-3**.

2.5.3 Wipe Samples

Analytical results of wipe samples were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 2-4**.

2.6 Conclusions of Alkaline Reactor Tank Decommissioning

Pure-Etch removed the four unused vertical process tanks identified as NK-1, CR-1, ER-1 and SR-1 that were originally purchased new by Pure-Etch in June 1994 but not activated into service. The tanks and associated ancillary piping networks were rinsed and sampled to verify the absence of hazardous constituents. Following wash and rinse sequences, laboratory analyses of the final rinse water and wipe tests of the inner tank shell surfaces verified the effectiveness of decontamination procedures. Upon analytical verification that hazardous constituents were not present, the tanks and piping network were dismantled and removed from the facility on August 14, 2002.

3.0 AMENDMENT No. 2 – HAZARDOUS WASTE CONTAINER REMOVAL

3.1 Description of Hazardous Waste Container Inventory

Closure Plan Amendment No. 2 of the facility RCRA closure process involved the removal of the hazardous waste container inventory within the regulated areas and laboratories. Closure activities included container inventory inspections of the process tank areas and sample testing laboratories, waste material sampling, laboratory analyses, chemical identification and regulatory characterization, container re-packaging, container marking and labeling, consolidation, staging, transportation and disposal.

The hazardous waste container inventory was comprised of discarded process chemicals, discarded laboratory chemicals and empty drums as shown on **Figure 4-2**. As part of closure, discarded laboratory chemicals from the **Waste Testing Laboratory** and **Plant Control Laboratory** were inventoried and consolidated. Discarded process chemicals in 55-gallon drums and smaller containers of hazardous materials in flammable storage cabinets were inventoried and processed for shipment and disposal. Waste Material Profile Sheets were prepared for the container inventory. These profiles contained information relating to waste descriptions, physical properties, compositions, constituents, regulatory status and transportation requirements. Vendor "Waste Material Profiles" for Amendment No. 2 included the following:

Table 3-1. Hazardous Waste Container Material Profiles.

Waste Material Profile Sheets	Waste Material Identification
Profile Number CH 158098	Phosphoric Acid
Profile Number CH 158099	Copper/Ammonium Chloride Solution
Profile Number CH 21534	Ammonia Compound Solution
Profile Number CH 21536	Empty Drums Last Containing Oil
Profile Number CH 21537	Floor Blasting Grit and Wastewater
Container Packing Lists	Hazardous Laboratory Chemicals

The complete container inventory is included in **Appendix C**.

3.2 Management and Location of Hazardous Waste Containers

Container management activities initially included inventory surveys of the process and laboratory areas and inspections of container integrity and storage areas. Container types and identification labels were recorded. When necessary, waste material sampling and laboratory analyses were performed for chemical identification and characterization. Containers not suitable for shipment

were transferred into new drums. Laboratory chemicals were chemically stabilized, classified on a chemical compatibility and regulatory basis and re-packaged into larger containers. Hazardous waste containers were consolidated and staged on the basis of chemical compatibility in Container **Management Area No. 1** and **Container Management Area No. 2**. These regulated areas are identified on **Figure 4-2**.

3.3 Shipment and Disposal of Hazardous Waste Containers

Containers were marked and labeled for transportation in accordance with U.S. Department of Transportation (U.S. DOT) regulations. Container packing lists (see **Appendix D**) were prepared for the chemical inventory which include U.S. DOT classification information (proper shipping names, container types, quantities, UN/NA numbers) and USEPA RCRA Waste Codes. This regulatory information was used to prepare the Uniform Hazardous Waste Manifests for off-site shipment.

A summary of shipments is provided in Table 3-2 below. Hazardous waste manifests are included in **Appendix D**.

Table 3-2. Shipment Records – Hazardous Waste Containers.

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped Regulated Area Location	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
5	10/15/2002	CTF0984835	Waste Corrosive Liquid. EPA HW No. D002. Container Management Area #1.	1	5	2,000	
6	10/15/2002	MDC0971163	Waste Flammable Liquid. EPA HW No. D001. Container Management Area #2.		2		10
6	10/15/2002	MDC0971163	Waste Flammable Solid. EPA HW No. D001. Container Management Area #2.		1		5
6	10/15/2002	MDC0971163	Waste Corrosive Liquid. EPA HW No. D002. Container Management Area #2.		4		21
6	10/15/2002	MDC0971163	Waste Ammonium Solution. EPA HW No. D002. Container Management Area #2.		4		1,600
6	10/15/2002	MDC0971163	Waste Phosphoric Acid. EPA HW No. D002. Container Management Area #2.		3		850
6	10/15/2002	MDC0971163	Non-DOT Regulated Material. Waste No. CR05. Container Management Area #2.		2		100
6	10/15/2002	MDC0971163	Non-DOT Regulated Material. Waste No. CR04. Container Management Area #2.		1		500
7	10/15/2002	IL9547806	Waste Corrosive Liquid. EPA HW No. D002. Container Management Area #2.		1		60

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped Regulated Area Location	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
7	10/15/2002	IL9547806	Waste Corrosive Liquid. EPA HW No. D002. Container Management Area #2.		1		20
7	10/15/2002	IL9547806	Waste Activated Carbon. EPA HW No. D003. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Silver Nitrate. EPA HW No. D001. Container Management Area #2.		1		2
7	10/15/2002	IL9547806	Waste Oxidizing Liquid. EPA HW No. D001. Container Management Area #2.		1		6
7	10/15/2002	IL9547806	Waste Aerosols. EPA HW No. D001. Container Management Area #2.		1		15
7	10/15/2002	IL9547806	Waste Mercury. EPA HW No. D009. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Ammonia Solutions. EPA HW No. D002. Container Management Area #2.		1		5
7	10/15/2002	IL9547806	Waste Sodium Borohydride. EPA HW No. D001. Container Management Area #2.		1		3
7	10/15/2002	IL9547806	Waste Acetic Acid. EPA HW No. D001. Container Management Area #2.		1		5
7	10/15/2002	IL9547806	Waste Sodium Cyanide. EPA HW No. P106. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Toxic Liquid. Inorganic. EPA HW No. D004. Container Management Area #2.		1		15
7	10/15/2002	IL9547806	Waste Flammable Liquid. EPA HW No. F003. Container Management Area #2.		1		20
7	10/15/2002	IL9547806	Waste Acrolein. EPA HW No. P009. Container Management Area #2		1		1
7	10/15/2002	IL9547806	Waste Flammable Liquid. EPA HW No. D001. Container Management Area #2.		4		918
7	10/15/2002	IL9547806	Waste Mercury Compounds. EPA HW No. D009. Container Management Area #2.		1		2
7	10/15/2002	IL9547806	Waste Propane. EPA HW No. D001. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Flammable Solids. EPA HW No. U165. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Toxic Liquid. Organic. EPA HW No. D006. Container Management Area #2.		1		72

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped Regulated Area Location	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
7	10/15/2002	IL9547806	Waste Cyanide. EPA HW No. D003. Container Management Area #2.		1		2
7	10/15/2002	IL9547806	Waste Dinitro-o-cresol. EPA HW No. P047. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Acrylonitrile. EPA HW No. U009. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Compressed Gases. EPA HW No. U135. Container Management Area #2.		1		4
7	10/15/2002	IL9547806	Waste Carbon Monoxide. Waste No. CR05. Container Management Area #2.		1		4
7	10/15/2002	IL9547806	Compressed Gases. Waste No. CR05. Container Management Area #2.		1		4
7	10/15/2002	IL9547806	Batteries. Waste No. CR05. Container Management Area #2.		1		100
7	10/15/2002	IL9547806	Toxic Solid. Waste No. CR05. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Dinitophenol. EPA HW No. P048. Container Management Area #2.		1		1
7	10/15/2002	IL9547806	Waste Hydrogen Peroxide. EPA HW No. D001. Container Management Area #2.		1		5
7	10/15/2002	IL9547806	Non-DOT Regulated Material. Waste No. CR05. Container Management Area #2.		1		150

3.4 Conclusions of the Container Inventory Removal

Closure Plan Amendment No. 2 of the facility RCRA closure process involved the removal of the hazardous waste container inventory within the regulated areas and laboratories. Closure activities included container inventory inspections of the process tank areas and sample testing laboratories, waste material sampling, laboratory analyses, chemical identification and regulatory characterization, container re-packaging, container marking and labeling, consolidation, staging, transportation and disposal. Discarded process chemicals in 55-gallon drums and smaller containers of hazardous materials in flammable storage cabinets were also inventoried and processed for shipment and disposal.

The hazardous waste container inventory shipment consisted of discarded process chemicals, discarded laboratory chemicals and empty drums consolidated into 50 containers totaling 4,508 pounds. Upon completion of this closure phase, there were no remaining inventories of hazardous waste.

4.0 AMENDMENT No. 3 – ALKALINE PROCESSING AND STORAGE TANKS

4.1 Dismantling of Tanks T-15, E-2, E-1, ER-2, D-1, S-2, S-1 and VC-2

Closure Plan Amendment No. 3 of the facility RCRA closure process involved the decontamination and dismantling of eight (8) tank and pipe systems in the **Alkaline Processing and Storage Area** as shown on **Figure 4-3**. These tanks were located in the Alkaline Storage and Processing Area adjacent to the central aisle of the facility within the concrete berm containment area.

These consisted of seven (7) fiberglass reinforced plastic tanks identified as **Tanks T-15, E-2, E-1, ER-2, S-2, S-1** and **VC-2** and one (1) cross-linked polyethylene tank identified as **Tank D-1**.

4.2 Tank Contents and Pipe Connection Inspections

Because this closure process involved an extensive interconnected network of pipes with tanks used for storage, processing and chemical reaction, process piping schematics were examined and detailed structural inspections were conducted prior to decontamination and dismantling of tank systems. Process tank and pipe schematics are included in **Appendix C-2**.

Results of tank inspections conducted on August 28, 2002 are summarized in Table 4-1 below:

Table 4-1. Alkaline Tank Functions and Inspection Results.

Tank	Capacity	Process Function and Chemical Use	Dimensions	Observed Contents
E-2	12,000 Gal.	Recovered Product Enhancement – Storage of fresh ammonium chloride etchant (before shipment).	13'-8"H x 12'-7"W	Empty. White crystalline precipitate residues and small amount of bottom liquid.
E-1	12,000 Gal.	Recovered Product Enhancement – Storage of fresh ammonium chloride etchant (before shipment).	13'-8"H x 12'-7"W	Empty. White crystalline precipitate residues.
ER-2	12,000 Gal.	Recovery Process – Makeup tank for ammonium chloride etchant.	13'-8"H x 12'-7"W	Empty. Very little white crystalline residue.
D-1	6,000 Gal.	1. Recovery Process – Mother liquid and copper oxide wash water storage tank (before treatment). 2. Treated Process Water – Filtered Process Water/Filtrate Water Tank.	12'-7"H x 9'-6"W	Empty. Light coating of residue on inner tank shell and small amount of bottom liquid.
S-2	20,000 Gal.	Alkaline Hazardous Waste – Storage of spent copper ammonium chloride etchant solution.	16'-6"H x 14'-10"W	Empty. Brownish residue on bottom dish.
S-1	20,000 Gal.	Alkaline Hazardous Waste – Storage of spent copper ammonium chloride etchant solution.	16'-6"H x 14'-10"W	Empty. Brownish residue on bottom dish.
VC-2	15,000 Gal.	Virgin Product Storage - Sodium hydroxide (caustic soda) storage to ER-SR-CR reactor tanks.	13'-10"H x 14'-7"W	Empty. White crystalline precipitate residues
T-15	4,000 Gal.	Unknown. Free-standing tank not pipe connected. Previously held accumulated storm water.	10'H x 8'W	Empty. No bottom residues.

4.3 Decontamination Procedures and Waste Disposal

The tanks and associated ancillary piping networks were rinsed and sampled to verify the

absence of hazardous constituents. Decontamination steps included the sequences of initial washes and final rinses as specified in Section 1.7. Rinse water was collected and temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results.

A summary of shipments is provided in Table 4-2 below. Hazardous waste manifests are included in **Appendix D**.

Table 4-2. Shipment Records - Alkaline Storage Tanks T-15, E-2, E-1, ER-2, D-1, S-2, S-1 and VC-2.

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
15	5/13/2003	MAQ393038	Non-Hazardous, Non-DOT Regulated Material. CTDEP Regulated Waste No. CR04. Solid waste debris from Alkaline Tanks and Pipes.		9		1,800
16	5/13/2003	MAQ393000	Non-Hazardous, Non-DOT Regulated Material. CTDEP Regulated Waste No. CR05/MADEP MA99. Wastewater from Alkaline Tanks and Pipes.	1		2,505	

4.4 Sampling and Laboratory Analysis Plan

A sampling plan was prepared for the purpose of evaluating effectiveness of the tank and piping system decontamination. Sampling and analytical procedures were based on guidance protocols established by the CT DEP Protocols as described in Section 1.8 were followed.

4.5 Analytical Laboratory Results of Tank and Pipe Samples

4.5.1 Sample Identification

Tank residues, wastewater and wipe samples were collected during the closure verification process to document decontamination effectiveness. Wipe samples were also collected from the internal surface of each tank and pipe sections visual determination that residues were removed. These locations are listed in Table 4-3 below and identified on **Figure 5-2**.

Table 4-3. Sample Point Identification.

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
1	08/28/02	**PE-214**	Tank E-2	TW	P-AE32795
2	08/28/02	**PE-215**	Tank E-1	TS	P-AE32796
3	08/28/02	**PE-216**	Tank ER-2	TS	P-AE32797

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
4	08/28/02	**PE-217**	Tank S-2	TS	P-AE32798
5	08/28/02	**PE-218**	Tank S-1	TS	P-AE32799
6	08/28/02	**PE-219**	Tank VC-2	TS	P-AE32800
7	08/28/02	**PE-228**	Tank D-1	TW	P-AE33156
8	08/28/02	**PE-230**	Tank E-2	TW	L0212430-02
9	08/28/02	**PE-231**	Tank E-1	TS	L0212430-03
10	08/28/02	**PE-232**	Tank ER-2	TS	L0212430-04
11	08/28/02	**PE-233**	Tank D-1	TW	L0212430-05
12	08/28/02	**PE-234**	Tank S-2	TS	L0212430-06
13	08/28/02	**PE-235**	Tank S-1	TS	L0212430-07
14	08/28/02	**PE-236**	Tank VC-2	TS	L0212430-08
15	11/27/02	**PE-243**	CH CW	CW	L0212430-15
16	11/27/02	**PE-244**	WW Tank VC-2	WW	L0212430-16
17	11/27/02	**PE-245**	Tank T-1	RW	L0212430-17
18	11/27/02	**PE-246**	Tank ER-1	RW	L0212430-18
19	11/27/02	**PE-247**	Tank E-1	RW	L0212430-19
20	11/27/02	**PE-248**	Tank E-2	RW	L0212430-20
21	11/27/02	**PE-249**	Tank S-1	RW	L0212430-21
22	11/27/02	**PE-250**	Tank S-2	RW	L0212430-22
23	11/27/02	**PE-251**	Tank VC-2	RW	L0212430-23
24	01/14/03	**PE-252**	NK1 Tank Base	CC	L0300502-01
25	01/14/03	**PE-253**	ALS TKS (DRUMS 1-3)	TS	L0300502-02
26	01/14/03	**PE-254**	ALS TKS (DRUMS 4-6)	TS	L0300502-03
27	01/15/03	**PE-255**	ALS TKS (DRUM 7)	TS	L0300502-04
28	01/14/03	**PE-256**	ALS PIPES 1 (BAG 1)	PS	L0300502-05
29	01/14/03	**PE-257**	ALS PIPES 2 (BAG 2)	PS	L0300502-06
30	01/14/03	**PE-258**	TOTE TK 15	TS	L0300502-07
31	01/14/03	**PE-259**	ALS PIPES (CH TOTE)	WW	L0300502-08
32	01/15/03	**PE-260**	Tank E2	W	L0300502-09

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
33	01/16/03	**PE-261**	Tank E2	W	L0300502-10
34	01/17/03	**PE-262**	Tank ER 2	W	L0300502-11
35	01/18/03	**PE-263**	Tank S2	W	L0300502-12
36	01/19/03	**PE-264**	Tank S1	W	L0300502-13
37	01/20/03	**PE-265**	Tank VC 2	W	L0300502-14
38	01/21/03	**PE-266**	ALS PIPE 1	W	L0300502-15
39	01/22/03	**PE-267**	ALS PIPE 2	W	L0300502-16
40	01/23/03	**PE-268**	ALS PIPE 3	W	L0300502-17
41	01/24/03	**PE-269**	ALS PIPE 4	W	L0300502-18
42	01/25/03	**PE-270**	ALS PIPE 5	W	L0300502-19
43	05/07/03	**PE-291**	ALS PIPE 6	W	L0304327-01
44	05/07/03	**PE-292**	ALS PIPE 7	W	L0304327-02
45	05/07/03	**PE-293**	ALS PIPE 8	W	L0304327-03
46	05/07/03	**PE-294**	ALS PIPE 9	W	L0304327-04
47	05/07/03	**PE-295**	ALS PIPE 10	W	L0304327-05
48	05/07/03	**PE-296**	ALS PIPE 11	W	L0304327-06
49	05/07/03	**PE-297**	ALS PIPE 12	W	L0304327-07
50	05/07/03	**PE-298**	ALS PIPE 13	W	L0304327-08
51	05/07/03	**PE-299**	ALS PIPE 14	W	L0304327-09

4.5.2 Tank Waste Residue Characterizations

During internal inspections of the tanks, representative samples were collected for analytical characterization to determine the presence hazardous chemical conditions requiring special measures to mitigate hazards during decontamination. A summary of analytical results of collected tank residues in presented in **Appendix G - Table 4-4**. Complete laboratory reports of samples collected from the tanks are included in **Appendix H**.

The results of the tank and pipe inspections and analytical laboratory results confirmed the presence small quantities of solidified chemical precipitates of spent copper ammonium chloride etchant solutions in the tanks. Residue deposits were observed in the tank bottoms and coating on the tank shells. The lower drainage pipes were plugged or partially filled with chemical solids. Ignitable, corrosive, toxic and reactive chemical conditions were not present.

4.5.3 Wastewater Samples

Analytical results were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 4-5**.

4.5.4 Wipe Samples

Analytical results were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 4-6**.

4.6 Conclusions of Alkaline Storage Tank Decommissioning

The decontamination of the tank and pipe system network identified as **Tanks T-15, E-2, E-1, ER-2, D-1, S-2, S-1** and **VC-2** in the **Alkaline Processing and Storage Area** was effective based on an evaluation of wastewater and wipe samples. The evaluation of analytical data from the tanks and associated ancillary piping networks verified the absence of hazardous constituents.

Review of analytical results for rinseate samples revealed effective removal of trace chemical residuals. The method of decontamination employed was effective in removing residual traces of contaminants of concern. Review of analytical results for wipe samples revealed effective removal of trace chemical residuals. There are no established numerical standards for wipe samples due to variances and inconsistencies posed by field sampling techniques, surface variations, materials of construction for various structures and analytical methodologies. As a result, there exists the potential for matrix interferences from the material being sampled. However, visual verification of the absence of chemical residues, knowledge of historical handling practices, data comparisons with final rinseate samples collectively provided a technical basis for review and evaluation that hazardous waste residues were effectively removed.

5.0 AMENDMENT No. 4 – ACID STORAGE TANKS

5.1 Dismantling of Tanks WT-4, B-1, C-1, VC-1, WT-1, WT-2, WT-3 and EH

Closure Plan Amendment No. 4 of the facility RCRA closure process involved the decontamination and dismantling of eight (8) tank and pipe systems in the **Acid Storage Tank and Acid Unloading Areas** adjacent to the central aisle of the facility within the concrete berm containment area and the **Filter Press** located adjacent to this work area identified on **Figure 4-4**.

These tank systems consisted of four (4) fiberglass reinforced plastic tanks **WT-4, B-1, VC-1,** and **EH** and four (4) cross-linked polyethylene tanks **C-1, WT-1, WT-2** and **WT-3.**

5.2 Tank Contents and Pipe Connection Inspections

Because this closure process involved an extensive interconnected network of pipes with tanks used for storage, processing and chemical reaction, process piping schematics were examined and detailed structural inspections were conducted prior to decontamination and dismantling of tank systems. Process tank and pipe schematics are included in **Appendix C-3**.

Results of tank inspections conducted on August 29, 2002 are summarized in Table 5-1 below:

Table 5-1. Acid Storage Area Tank Functions and Inspection Results.

Tank	Capacity	Process Function and Chemical Use	Dimensions	Observed Contents
WT-4	5390 Gal.	Wastewater Treatment – Filtered accumulated stormwater. Also identified as T-12 and SW-1.	13'H x 9'W	Empty.
B-1	10,553 Gal.	Acidic Hazardous Waste Storage – Waste acid bulking and accumulation tank.	16'H x 12'-2"W	Empty. Some brown residue on bottom.
C-1	6,000 Gal.	Acidic Hazardous Waste Storage – Storage of spent cupric chloride etchant solution.	10'H x 12'W	Empty. Solid residue on bottom.
VC-1	10,553 Gal.	Virgin Product Storage – Hydrochloric acid storage for ammonium chloride reconstitution (to reactor tank ER-2).	16'H x 12'2"W	Full of Hydrochloric acid. Measured 79-inches freeboard from top of tank to product. Measured 113-inches of product.
WT-1	6,000 Gal.	Wastewater Treatment Tank (under wastewater discharge permit).	10'H x 12'W	Empty. Liquid residue on bottom.
WT-2	6,000 Gal.	Wastewater Treatment Tank (under wastewater discharge permit).	10'H x 12'W	Full. Unknown aqueous liquid. Assumed to be rainfall from hole in roof into open tank manway.
WT-3	6,000 Gal.	Wastewater Treatment Tank (under wastewater discharge permit).	10'H x 12'W	Empty. Solid residues on bottom.
EH	10,638 Gal.	Effluent Holding Tank – Storage of wastewater from Filter Press #2 (T-13A Treated Sludge Storage) and WT-1, WT-2 and WT-3.	14'H x 12'2"W	Empty. Open side manway.

5.3 Decontamination Procedures and Waste Disposal

5.3.1 Management of Virgin Hydrochloric Acid in Tank VC-1

Tank VC-1 was a non-RCRA tank used for the storage of virgin hydrochloric acid (muriatic acid 34.45%). Chemical purity testing of the hydrochloric acid determined the material to exhibit

physical properties of appearance, specific gravity and vapor density of 20° Baume acceptable for commercial reuse as a virgin product. Accordingly, since the acid within Tank VC-1 had not been used in any process and was "recycled" (i.e., reused) as a commercially viable product by a qualified business, it did not have to be managed as a hazardous waste. Under this management scenario, the hydrochloric acid was sold by Pure-Etch to H. Krevit & Company, Inc. located in New Haven, Connecticut. Standard health and safety practices were followed during the tank pump-out. Shipment of the acid conformed to rules and regulations promulgated by the U.S. Department of Transportation (US DOT) including use of a hazardous materials shipping paper.

After quantities of free liquid had been gravity drained and purged from tank pipelines, residual acid within the tank system (tank and pipes) was neutralized and flushed with dilute solutions of sodium bicarbonate. Wastewater was pH tested and temporarily accumulated in a holding tank during the decontamination of other tanks and pipe sections within the Acid Storage Area.

5.3.2 Management of Decontamination Wastewater

The tanks and associated ancillary piping networks were rinsed and sampled to verify the absence of hazardous constituents. Decontamination steps included the sequences of initial washes and final rinses as specified in Section 1.7. Rinse water was collected and temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results. A summary of shipments is provided in Table 5-2 below. Hazardous waste manifests are included in **Appendix D**.

Table 5-2. Shipment Records - Acid Tanks WT-4, B-1, C-1, VC-1, WT-1, WT-2, WT-3 and EH.

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
9	12/23/2002	BOL161759	Virgin Hydrochloric Acid. UN1789. Pumped from Tank VC-1 by Krevit.	1		5,300	
10	2/3/2003	BOL162723	Virgin Hydrochloric Acid. UN1789. Pumped from Tank VC-1 by Krevit.		27	405	
11	2/2/2003	BOL162808	Virgin Hydrochloric Acid. UN1789. Pumped from Tank VC-1 by Krevit.		45	675	
12	2/11/2003	BOL162963	Virgin Hydrochloric Acid. UN1789. Pumped from Tank VC-1 by Krevit.		3	38	
13	4/28/2003	MAQ080884	Non-DOT Regulated Material. CTDEP Regulated Waste No. CR04. Acid Tank and Filter Press Trenches.	1		4,850	
14	4/29/2003	MAQ356793	Non-DOT Regulated Material. CTDEP Regulated Waste No. CR04. Acid Tank and Filter Press Trenches.	1		2,500	

5.4 Sampling and Laboratory Analysis Plan

A sampling plan was prepared for the purpose of evaluating effectiveness of the tank and piping system decontamination. Sampling and analytical procedures were based on guidance protocols

established by the CT DEP Protocols as described in Section 1.8 were followed.

5.5 Analytical Laboratory Results of Tank and Pipe Samples

5.5.1 Sample Identification

Tank residues, wastewater and wipe samples were collected during the closure verification process to document decontamination effectiveness. Wipe samples were also collected from the internal surface of each tank, internal ends of pipe sections and the underside of the tank support leg pads following a visual determination that residues were removed. These locations are listed in Tables 5-3a to 5-3c and identified on **Figure 5-2**.

Table 5-3a Sample Point Identification for Tank Wastewater Samples.

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No
1	08/28/02	**PE-220**	Tank B-1	TS	P-AE33148
2	08/28/02	**PE-221**	Tank SW-1	TS	P-AE33149
3	08/28/02	**PE-222**	Tank VC-1	TW	P-AE33150
4	08/28/02	**PE-223**	Tank C-1	TS	P-AE33151
5	08/28/02	**PE-224**	Tank WT-1	TW	P-AE33152
6	08/28/02	**PE-225**	Tank WT-2	TW	P-AE33153
7	08/28/02	**PE-226**	Tank WT-3	TS	P-AE33154
8	08/28/02	**PE-227**	Tank EH	TS	P-AE33155
9	08/28/02	**PE-229**	Tank EH	TS	A-L0212430-01
10	08/28/02	**PE-237**	Tank WT-4	TS	A-L0212430-09
11	08/28/02	**PE-238**	Tank B-1	TS	A-L0212430-10
12	08/28/02	**PE-239**	Tank C-1	TS	A-L0212430-11
13	08/28/02	**PE-240**	Tank WT-1	TW	A-L0212430-12
14	08/28/02	**PE-241**	Tank WT-2	TW	A-L0212430-13
15	08/28/02	**PE-242**	Tank WT-3	W	A-L0212430-14
16	02/04/03	**PE-271**	CYN CW-1	CW	A-L0301634-05
17	02/04/03	**PE-272**	Tank EH	RW	A-L0301634-06
18	02/04/03	**PE-273**	Tank B-1	RW	A-L0301634-07
19	02/04/03	**PE-274**	FP	RW	A-L0301634-08
20	02/05/03	**PE-275**	Tank WT-4	RW	A-L0301634-09

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No
21	02/06/03	**PE-276**	Tank WT-3	RW	A-L0301634-10
22	02/06/03	**PE-277**	Tank WT-2	RW	A-L0301634-11
23	02/06/03	**PE-278**	CYN CW-2	CW	A-L0301634-12
24	02/07/03	**PE-279**	Tank WT-1	RW	A-L0301634-13
25	02/07/03	**PE-280**	Tank C-1	RW	A-L0301634-14
26	02/19/03	**PE-281**	CYN CW-3	CW	A-L0301634-15
27	02/19/03	**PE-282**	Tank VC-1	RW	A-L0301634-16

Table 5-3b. Sample Point Identification for Tank Wipe Samples.

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
28	02/20/03	**PE-283**	Tank WT-3	W	A-L0301634-17
29	02/20/03	**PE-284**	Tank WT-2	W	A-L0301634-18
30	02/20/03	**PE-285**	Tank WT-1	W	A-L0301634-19
31	02/20/03	**PE-286**	Tank VC-1	W	A-L0301634-20
32	02/20/03	**PE-287**	Tank C-1	W	A-L0301634-21
33	02/20/03	**PE-288**	Tank B-1	W	A-L0301634-22
34	02/20/03	**PE-289**	Tank WT-4	W	A-L0301634-23
35	02/20/03	**PE-290**	Tank EH	W	A-L0301634-24
36	05/02/03	**PE-401**	Tank B-1	W	A-L0304140
37	05/02/03	**PE-402**	Tank B-1	W	A-L0304140
38	05/02/03	**PE-403**	Tank VC-1	W	A-L0304140
39	05/02/03	**PE-404**	Tank WT-4	W	A-L0304140
40	05/02/03	**PE-405**	Tank EH	W	A-L0304140
41	05/02/03	**PE-406**	Tank C-1	W	A-L0304140
42	05/02/03	**PE-407**	Tank WT-1	W	A-L0304140
43	05/02/03	**PE-408**	Tank WT-2	W	A-L0304140
44	05/02/03	**PE-409**	Tank WT-3	W	A-L0304140
45	05/06/03	**PE-410**	Tank E-2	W	A-L0304326

No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
46	05/06/03	**PE-411**	Tank E-1	W	A-L0304326
47	05/06/03	**PE-412**	Tank ER-2	W	A-L0304326
48	05/06/03	**PE-413**	Tank S-2	W	A-L0304326
49	05/06/03	**PE-414**	Tank S-1	W	A-L0304326
50	05/06/03	**PE-415**	Tank VC-2	W	A-L0304326
51	05/06/03	**PE-416**	Tank D-1	W	A-L0304326
52	05/06/03	**PE-417**	Tank T-15	W	A-L0304326

Table 5-3c. Sample Point Identification for Acid Tank Support Leg Pads

No.	Sample Date	Sample URS ID		Source Location	Matrix	Laboratory Identification No.
53	08/03/06	**EN-418**	**WT-1A**	Tank WT-1	W	E-L0611090
54	08/03/06	**EN-419**	**WT-1B**	Tank WT-1	W	E-L0611090
55	08/03/06	**EN-420**	**WT-1A1**	Tank WT-1	W	E-L0611090
56	08/03/06	**EN-421**	**WT-1A2**	Tank WT-1	W	E-L0611090
57	08/03/06	**EN-422**	**WT-1B1**	Tank WT-1	W	E-L0611090
58	08/03/06	**EN-423**	**WT-1B2**	Tank WT-1	W	E-L0611090
59	08/03/06	**EN-424**	**WT-3A**	Tank WT-3	W	E-L0611090
60	08/03/06	**EN-425**	**WT-3B**	Tank WT-3	W	E-L0611090
61	08/03/06	**EN-426**	**WT-3A1**	Tank WT-3	W	E-L0611090
62	08/03/06	**EN-427**	**WT-3A2**	Tank WT-3	W	E-L0611090
63	08/03/06	**EN-428**	**WT-3B1**	Tank WT-3	W	E-L0611090
64	08/03/06	**EN-429**	**WT-3B2**	Tank WT-3	W	E-L0611090
65	08/03/06	**EN-430**	**WT-2A**	Tank WT-2	W	E-L0611090
66	08/03/06	**EN-431**	**WT-2B**	Tank WT-2	W	E-L0611090
67	08/03/06	**EN-432**	**WT-2A1**	Tank WT-2	W	E-L0611090
68	08/03/06	**EN-433**	**WT-2A2**	Tank WT-2	W	E-L0611090
69	08/03/06	**EN-434**	**WT-2B1**	Tank WT-2	W	E-L0611090
70	08/03/06	**EN-435**	**WT-2B2**	Tank WT-2	W	E-L0611090
71	08/03/06	**EN-436**	**C-1A**	Tank C-1	W	E-L0611090

No.	Sample Date	Sample URS ID		Source Location	Matrix	Laboratory Identification No.
72	08/03/06	**EN-437**	**C-1B**	Tank C-1	W	E-L0611090
73	08/03/06	**EN-438**	**C-1A1**	Tank C-1	W	E-L0611090
74	08/03/06	**EN-439**	**C-1A2**	Tank C-1	W	E-L0611090
75	08/03/06	**EN-440**	**C-1B1**	Tank C-1	W	E-L0611090
76	08/03/06	**EN-441**	**C-1B2**	Tank C-1	W	E-L0611090

5.5.2 Tank Waste Residue Characterizations

During internal inspections of the tanks, representative samples were collected for analytical characterization to determine the presence hazardous chemical conditions requiring special measures to mitigate hazards during decontamination. A summary of analytical results of collected tank residues in presented in **Appendix G - Table 5-4**. Complete laboratory reports of samples collected from the tanks are included in **Appendix H**.

The results of the tank and pipe inspections and analytical laboratory results confirmed the presence small quantities of solidified chemical precipitates of spent copper ammonium chloride etchant solutions in the tanks. Residue deposits were observed in the tank bottoms and coating on the tank shells. The lower drainage pipes were partially filled with chemical solids. Ignitable, corrosive, toxic and reactive chemical conditions were not present.

5.5.3 Wastewater Samples

Analytical results were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 5-5**.

5.5.4 Wipe Samples

Wipe samples were collected from the internal surface of each tank and pipe section as part of the closure verification process to document decontamination effectiveness. Analytical results were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 5-6**. These locations are identified on **Figure 5-2**.

5.6 Conclusions of Acid Storage Tank Decommissioning

The decontamination of the tank and pipe system network identified as **Tanks WT-4, B-1, C-1, VC-1, WT-1, WT-2, WT-3 and EH** and the **Filter Press** in the **Acid Storage Area** was effective based on an evaluation of wastewater and wipe samples. The evaluation of analytical data from the tanks and associated ancillary piping networks verified the absence of hazardous constituents.

Review of analytical results for rinseate samples revealed effective removal of trace chemical

residuals. The method of decontamination employed was effective in removing residual traces of contaminants of concern. Review of analytical results for wipe samples revealed effective removal of trace chemical residuals. There are no established numerical standards for wipe samples due to variances and inconsistencies posed by field sampling techniques, surface variations, materials of construction for various structures and analytical methodologies. As a result, there exists the potential for matrix interferences from the material being sampled. However, visual verification of the absence of chemical residues, knowledge of historical handling practices, data comparisons with final rinseate samples collectively provided a technical basis for review and evaluation that hazardous waste residues were effectively removed.

6.0 AMENDMENT No. 5 – TRENCH CONTAINMENT SYSTEMS, LABORATORY AREAS and CONTAINER MANAGEMENT AREAS

6.1 Location and Description of Areas

Closure Plan Amendment No. 4 of the facility RCRA closure process involved the decontamination of concrete floor surfaces within the container management processing areas, testing laboratories and the trench systems within the facility. Work activities under this amendment included removal of liquid waste from the trench containment units which served as part of the containment structures for the regulated units within the facility. In addition, tasks under this amendment also included decontamination of Container Management Area #1, Container Management Area #2, the Container Unloading/Decanting/Washing Area and the entire concrete surface of the central aisle of the main plant. Regulated units and related other areas under Amendment No. 5 are identified on **Figure 4-5**.

6.1.1 Container Management Area #1

Container Management Area #1 (see **Figure 4-5**) is an approximate 900 square foot area formerly used for container staging. This regulated unit was designed for the storage of nine (9) pallets each with four (4) 55-gallon drums. The concrete surface area is protected with an epoxy coat. Under closure activities, this area will serve to stage palletized drums and totes. Chemical inventory was removed under Amendment No. 2. This area currently serves for the storage of surplus equipment.

6.1.2 Container Management Area #2

Container Management Area #2 (see **Figure 4-5**) is an approximate 170 square foot area formerly used for container staging. This regulated unit was designed for the storage of individual 55-gallon drums. The concrete surface area is protected with an epoxy coat. During closure, containers and discarded laboratory chemicals ("labpacks") were temporarily staged in this area. The chemical inventory was removed under Amendment No. 2. This area currently serves for the storage of dismantled and decontaminated pipes and surplus equipment.

6.1.3 Container Unloading/Decanting/Washing Area

The Container Unloading/Decanting/Washing Area (see **Figure 4-5**) is an approximate 300 square foot area formerly used for receiving and processing waste containers. Waste containers were unloaded and, based on chemical contents and pH, were pumped to acid storage tank C-1 or alkaline storage tank S-1. This area currently serves for the storage of surplus equipment.

6.1.4 Plant Control Laboratory No. 2

This laboratory area (see **Figure 4-5**) was designed for the inspection and monitoring of waste processing functions within the facility. A sink drain from the laboratory discharged into Sump Containment No. 2.

6.1.5 Waste Testing Laboratory No. 1

This laboratory area (see **Figure 4-5**) was designed for receiving and characterizing waste samples submitted by customers for approval. Wet chemistry methods were performed to screen and analytical characterize waste samples for compatibility and treatment of processes utilized by the facility.

6.1.6 Trench and Sump Units

Regulated units within the facility are served by a network of concrete trenches and sump units that function as part of the secondary containment system. Longitudinal trenches are connected to designated collection sumps. These structures are identified on **Figure 4-5** and are summarized in the Table 6-1 below:

Table 6-1. Trench and Sump Containment Systems.

Trench and Sump Containment Area	Trench Dimensions Length x Width x Depth (Ft.)	Sump Dimensions Length x Width x Depth (Ft.)	Regulated Unit Served By Trench and Sump Containment Area
Sump Containment No. 1	None	8 x 12 x 3	Container Management Area #1
Trench Drain No. 2	52 x 2 x 2	8 x 12 x 3	Container Management Area #2 Container Unloading / Decanting/ Washing Area
Sump Containment No. 2	None	8 x 12 x 3	Plant Control Laboratory No. 2 Alkaline Unloading Pad
Trench Drain and Sump Containment No. 3	34 x 2 x 2	8 x 10 x 3 8 x 3 x 3	Acid Storage and Wastewater Tank Area Acid Unloading Pad
Trench Drain and Sump Containment No. 4	45 x 2 x 2	12 x 8 x 3	Alkaline Storage & Processing Tank Area
Sump Containment No. 5	20 x 2 x 2	None	Filter Press Area
Sump Containment No. 6	5 x 2 x 2	None	Temporary Area for Acid Containers

6.2 Decontamination Procedures and Waste Disposal

6.2.1 Decontamination Procedures and Waste Disposal

Concrete surfaces within the container management areas and trenches were initially pumped of contents, washed using a decontamination solution and final rinsed as described in section 1.7. Following the procedures, a final rinsewater and concrete chip samples were collected to evaluate the effectiveness of the decontamination sequence. Sample analyses were performed to verify the absence of hazardous constituents in accordance with section 1.8.

Closure activities under Amendment No. 5 related to decontamination of concrete surfaces within containment areas of the regulated units and trench systems were conducted in progressive

phases. These activities were coordinated with other closure amendments and integrated with other tasks to effectively prevent translocation of contaminants. A summary of the sequence conducted to decontaminate the concrete floor areas and containment trench and sump systems within the regulated units is summarized in Table 6-2 below:

Table 6-2. Decontamination Sequences of the Concrete Floor and Trench Containment Systems.

Date	Phase	Description of Areas
June 4, 2002	Initial power wash sequence of the regulated areas.	Alkaline Storage and Processing Area including Sump Containment #4 and Trench Drain #4. Acid Storage Area including Sump Containment #3 and Trench Drain #3. Wastewater Treatment Area. Filter Press Area including Sump Containment #5. Central Isle Area including Sump Containment #1, Sump Containment #2 and Trench Drain #2. Container Management Area #1. Mechanical Room. Removed the following liquids from the trenches during and after power washing: Tank Truck – 2,768 gallons (Manifest # CT F 0983295). Tank Truck – 2,397 gallons (Manifest # CT F 0983305).
June 5, 2002	Second power wash and final rinse sequence of the regulated areas.	Alkaline Storage and Processing Area including Sump Containment #4 and Trench Drain #4. Acid Storage Area including Sump Containment #3 and Trench Drain #3. Wastewater Treatment Area. Filter Press Area including Sump Containment #5. Central Isle Area including Sump Containment #1, Sump Containment #2 and Trench Drain #2. Container Management Area #1. Mechanical Room. Removed the following liquid from trenches during final power washing and rinse: Tank Truck – Estimated 2,000 gallons (Manifest # CT F 0983304).
August 29, 2002	Removal of accumulated water.	Pumped accumulated water from Filter Press Area and Sump Containment #5 Tank Truck – 3,000 gallons (Manifest # CT F 0980478).
November 26, 2002	Removal of accumulated water.	Pumped rainwater that had accumulated on the Acid Unloading Area into Sump Containment # 3.

Date	Phase	Description of Areas
November 27, 2002	Initial power wash and second power wash and final rinse sequence of tanks and floor area. Removal of accumulated water.	Power washed Exterior of Tanks D-1, S-2, S-1, VC-2, E-2, E-1, ER-2 in the Alkaline Storage and Processing Area. After power washing tanks, power washed complete floor of the Alkaline Storage and Processing Area and Container Management Area #2. Removed the following standing liquid from the following areas: Sump Containment # 1, 2, 3, 4 and 5 and Trench Drains # 2, 3, and 4. Tank Truck – 4,634 gallons (Manifest # CT F 0981202).
December 3, 2002	Initial power wash. Removal of accumulated water.	Power washed floor of Container Management Area #1 and Sump Containment No. 1. Pumped water into 220-Gallon Tote container in Central Isle Area.
February 20, 2003	Initial power wash. Removal of accumulated water.	Initial power washed floor of Acid Storage Area. Work temporarily suspended due to ice build-up on floor and in trenches.
April 28, 2003	Second power wash and final rinse sequence. Removal of accumulated water.	Pump trench and floor water from Acid Storage and Filter Press Areas and from trench systems. Tank Truck – 4,850 gallons (Manifest # MA Q 080884).
April 29, 2003	Second power wash and final rinse sequence. Removal of accumulated water.	Pump trench and floor water from Acid Storage and Filter Press Areas and from trench systems. Tank Truck – 2,500 gallons (Manifest # MA Q 356793).

6.2.2 Management and Disposal of Wastewater

Wastewater was collected and directly pumped to tank trucks or temporarily stored in portable skid-mounted tanks pending evaluation of analytical laboratory results. Upon verification that the cleaning sequence was completed, off-site treatment and disposal of the final accumulated wastewater to a permitted facility was arranged by URS. A summary of shipments is provided in Table 6-2 below. Hazardous waste manifests are included in **Appendix D**.

Table 6-2. Shipment Records for Trench Containment Structures.

Shipment No.	Date of Shipment	Manifest Document No.	Waste Type Shipped	Quantity		Unit	Vol./Wt.
				TT	Dr	Gal.	LBS
1	06/04/02	CTF0983295	Hazardous Waste Liquid. EPA HW No. F006. Acid Storage Area.	1		2,768	
2	06/04/02	CTF0983305	Hazardous Waste Liquid. EPA HW No. F006. Alkaline Storage Area. Container Management Area #1.	1		2,397	
3	06/05/02	CTF0983304	Hazardous Waste Liquid. EPA HW No. F006. Container Management Area #2. Central Aisle Area. Mechanical Room.	1		2,000	
4	08/29/02	CTF0980478	Hazardous Waste Liquid. EPA HW No. F006. Filter Press Area.	1		3,000	
8	11/27/2002	CTF0981202	Hazardous Waste Liquid. EPA HW No. F006. Acid and Alkaline Tank Area Trenches.	1		4,634	
17	7/3/2003	MAQ412103	Non-Hazardous, Non-DOT Regulated Material. CTDEP Regulated Waste No. CR04/MADEP MA99. Rainwater from Trenches.	1		5,624	
18	7/3/2003	MAK071224	Non-Hazardous, Non-DOT Regulated Material. CTDEP Regulated Waste No. CR04/MADEP MA99. Rainwater from Trenches.	1		2,048	
19	11/14/2005	CTF1212862	Hazardous Waste Liquid. EPA HW No. F006. Acid Tank Area Floor/Trench/Sump.	1		4,900	
20	11/14/2005	CTF1212864	Hazardous Waste Liquid. EPA HW No. F006. Acid Tank Area Floor/Trench/Sump.	1		2,100	
21	11/22/2005	CTF1213038	Hazardous Waste Liquid. EPA HW No. F006. Acid Tank Area Floor/Trench/Sump.	1		5,000	
22	12/1/2005	CTF1207031	Hazardous Waste Liquid. EPA HW No. F006. Acid Tank Area Floor/Trench/Sump.	1		5,200	

6.3 Sampling and Laboratory Analysis Plan

A sampling plan was prepared for the purpose of evaluating effectiveness of the system decontamination. Sampling and analytical procedures were based on guidance protocols established by

the CT DEP Protocols as described in Section 1.8 were followed.

6.4 Analytical Laboratory Results of Concrete Floor and Containment System

6.4.1 Sample Identification

Trench containment residue and wastewater samples were collected during the closure verification process to analytically characterize contaminants of concern to document conditions prior to implementing decontamination procedures. Analytical data was used to evaluate the required decontamination sequence and to evaluate effectiveness. These sample locations are listed in Table 6-3a and identified on **Figure 5-1 and Figure 5-2**.

Table 6-3a - Sample Point Identification for Residue and Wastewater Samples.

ENTRY No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
1	01/07/02	**PE-101**	East Trench	RO	A-L0200168-01
2	01/07/02	**PE-102**	West Trench	RO	A-L0200168-02
3	05/30/02	**PE-109**	CM1	FS	A-L0205316-02
4	05/30/02	**PE-110**	CM2	FS	A-L0205316-01
5	07/19/02	**PE-110**	CM2	FS	A-L0206786-01
6	05/30/02	**PE-111**	ALS	FS	A-L0205316-03
7	05/30/02	**PE-112**	ACS	FS	A-L0205316-05
8	07/19/02	**PE-112**	ACS	FS	A-L0206786-02
9	05/30/02	**PE-113**	FP	FS	A-L0205316-04
10	05/30/02	**PE-114**	CS	FS	A-L0205316-06
11	05/31/02	**PE-115**	ACL	FS	A-L0205316-07
12	06/04/02	**PE-116**	SC1	BS	A-L0205411-03
13	06/04/02	**PE-117**	SC2	BS	A-L0205411-05
14	06/04/02	**PE-118W**	SC3	RO	A-L0205411-01
15	06/04/02	**PE-118S**	SC3	BS	A-L0205411-08
16	07/19/02	**PE-118**	SC3	BS	A-L0206786-03
17	06/04/02	**PE-119**	SC4	BS	A-L0205411-07
18	06/04/02	**PE-120**	SC5	BS	A-L0205411-06
19	06/04/02	**PE-121**	SC6	BS	A-L0205411-04
20	06/04/02	**PE-122**	Tank T-15	TW	A-L0205411-02

ENTRY No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
21	06/13/02	**PE-123**	Grid H6	SS	A-L0205834-01
22	06/13/02	**PE-124**	Grid L6	SS	A-L0205834-02
23	07/19/02	**PE-124**	Grid L6	SS	A-L0206786-04
24	06/13/02	**PE-125**	Grid P9	SS	A-L0205834-03
25	06/13/02	**PE-126**	Grid R12	SS	A-L0205834-04
26	06/13/02	**PE-127**	Grid R18	SS	A-L0205834-05
27	06/13/02	**PE-128**	Grid N16	SS	A-L0205834-06
28	07/19/02	**PE-128**	Grid N16	SS	A-L0206786-05
29	06/13/02	**PE-129**	Grid D17	SS	A-L0205834-07
30	06/13/02	**PE-130**	Grid D15	SS	A-L0205834-08
31	06/13/02	**PE-131**	Grid E11	SS	A-L0205834-09
32	06/13/02	**PE-132**	Grid G9	SS	A-L0205834-10
33	09/14/04	**EN-133**	Acid Sump 3	SC	E-04090238-01
34	09/14/04	**EN-134**	Alk Sump 4	SC	E-04090238-02
35	09/14/04	**EN-135**	Old Drain Sump 3	SC	E-04090238-03
36	08/02/06	**EN-136**	Sump #2 Container Area	SC	E-06080023-01
37	08/02/06	**EN-137**	Sump #5 Filter Press Area	SC	E-06080023-02

Concrete chip samples were collected during the closure verification process to document decontamination effectiveness. These locations are listed in Table 6-3b below and identified on **Figure 5-3**.

Table 6-3b - Sample Point Identification for Concrete Chip Samples.

ENTRY No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
38	06/04/02	**PE-301**	CM1	CC	L0211540-01 L0212027-01
39	10/22/02	**PE-302**	NWCP Silo Tank	CC	L0211540-02
40	10/22/02	**PE-303**	ALS Tank NK-1 Berm	CC	L0211540-03
41	10/22/02	**PE-304**	ACL	CC	L0211540-04 L0212027-02

ENTRY No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
42	11/06/02	**PE-305**	TR2	CC	L0211540-05
43	11/06/02	**PE-306**	CM2	CC	L0211540-06 L0212027-03
44	11/06/02	**PE-307**	CM2	CC	L0211540-07
45	11/06/02	**PE-308**	CM1	CC	L0211540-08
46	11/06/02	**PE-309**	CM1	CC	L0211540-09
47	11/06/02	**PE-310**	ALS Tank SR	CC	L0211540-10
48	11/06/02	**PE-311**	ALS Tank NK/CR	CC	L0211540-11
49	11/06/02	**PE-312**	FP	CC	L0211540-12 L0212027-04
50	11/06/02	**PE-313**	ACS Tank VC/B1	CC	L0211540-13 L0212027-05
51	11/06/02	**PE-314**	ACS Tank C1/WT4	CC	L0211540-14 L0212027-06
52	11/06/02	**PE-315**	ACS Tank SC 3	CC	L0211540-15 L0212027-07
53	11/06/02	**PE-316**	CS Tank EH	CC	L0211540-16
54	11/06/02	**PE-317**	CS FP	CC	L0211540-17 L0212027-08
55	11/06/02	**PE-318**	CS near ACS	CC	L0211540-18 L0212027-09
56	11/06/02	**PE-319**	CS near TR 2	CC	L0211540-19
57	11/06/02	**PE-320**	CS O/H Door	CC	L0211540-20
58	11/06/02	**PE-321**	ACL Valves	CC	L0211540-21 L0212027-10
59	11/06/02	**PE-322**	ACL Pipes	CC	L0211540-22 L0212027-11
60	11/06/02	**PE-323**	ALL Entry	CC	L0211540-23
61	01/15/03	**PE-324**	Tanks E2 E1	CC	L0300515-01
62	01/15/03	**PE-325**	O/H CATWALK	CC	L0300515-02
63	01/15/03	**PE-326**	Tank ER-2 SUMP	CC	L0300515-03
64	01/15/03	**PE-327**	Tank VC-2 SUMP	CC	L0300515-04
65	01/15/03	**PE-328**	Tank S-1	CC	L0300515-05
66	01/15/03	**PE-329**	ERO (N)	CC	L0300515-06
67	01/15/03	**PE-330**	Tank S-2 (N)	CC	L0300515-07
68	01/15/03	**PE-331**	ERO (S)	CC	L0300515-08

ENTRY No.	Sample Date	Sample URS ID	Source Location	Matrix	Laboratory Identification No.
69	01/15/03	**PE-332**	Tank D-1	CC	L0300515-09
70	01/15/03	**PE-333**	Tank S-2 (S)	CC	L0300515-10
71	01/15/03	**PE-334**	Tank VC-2	CC	L0300515-11
72	01/15/03	**PE-335**	Tank ER-2 SUMP	CC	L0300515-12
73	01/15/03	**PE-336**	SUMP 4	CC	L0300515-13
74	01/15/03	**PE-337**	Tank E-1	CC	L0300515-14
75	01/15/03	**PE-338**	CM1 (N)	CC	L0300515-15
76	01/15/03	**PE-339**	CM1 (E)	CC	L0300515-16
77	01/15/03	**PE-340**	CM1 (W)	CC	L0300515-17
78	01/15/03	**PE-341**	CM2 (N)	CC	L0300515-18
79	01/15/03	**PE-342**	CM2 Eyewash Sta.	CC	L0300515-19
80	01/15/03	**PE-343**	Tank D-1 (S)	CC	L0300515-20
81	02/06/03	**PE-344**	CU/D/W (N)	CC	L0301634-01
82	02/06/03	**PE-345**	CU/D/W (GRATE)	CC	L0301634-02
83	02/06/03	**PE-346**	CU/D/W (S)	CC	L0301634-03
84	02/07/03	**PE-347**	PCL DRAIN	CC	L0301634-04

6.4.2 Concrete Floor Sediment Residue and Wastewater Samples

Accumulated wastewater and sediment residue samples were collected from the trenches. A waste profile was prepared for characterization and processing for off-site treatment and disposal. The results of the inspections and analytical laboratory results confirmed minimal levels of contamination. Ignitable, corrosive, toxic and reactive chemical conditions were not present. A summary of analytical results of collected residues is presented in **Appendix G - Table 6-4**. Complete laboratory reports of samples collected from the trench units are included in **Appendix H**.

6.4.3 Concrete Chip Samples

Analytical results were evaluated to determine effectiveness of decontamination procedures. Results are summarized in **Appendix G - Table 6-5**.

6.6 Conclusions of Decontamination of Concrete Floor and Trench Containment Systems

The decontamination of the network of facility trench structures, testing laboratories, Container Management Area #1, Container Management Area #2 and the Container Unloading/Decanting/

Washing Area was effective based on an evaluation of wastewater, wipe and concrete chip samples. The evaluation of analytical data verified the absence of hazardous constituents within the Regulated Units with the exception of the Acid Tank Storage Area.

Review of analytical results for rinseate samples revealed effective removal of trace chemical residuals. The method of decontamination employed was effective in removing residual traces of contaminants of concern. Review of analytical results for wipe samples revealed effective removal of trace chemical residuals. There are no established numerical standards for wipe samples due to variances and inconsistencies posed by field sampling techniques, surface variations, materials of construction for various structures and analytical methodologies. As a result, there exists the potential for matrix interferences from the material being sampled. However, visual verification of the absence of chemical residues, knowledge of historical handling practices, data comparisons with final rinseate samples collectively provided a technical basis for review and evaluation that hazardous waste residues were effectively removed.

Analytical results of concrete chip samples collected from the surface of Acid Tank Storage Area revealed total mass concentrations of lead ranging from 800 to 9,200 milligram per kilogram. However, there were no exceedances of TCLP concentrations of lead for these locations. The collection of concrete samples from the upper ¼-inch of the floor surface, review of analytical results and locations of sample points suggests acidic lead compound solutions are chemically stabilized (i.e., not mobile) within the concrete matrix below the epoxy-coat. This condition was further evaluated in the integrity assessment phase of the closure process reported in Section 7.0.

7.0 AMENDMENT No. 6 - INTEGRITY ASSESSMENT of the REGULATED UNITS

7.1 Potential Release Areas Requiring Further Evaluation

Following waste removal and surficial decontamination, URS conducted detailed visual inspections within the regulated areas to determine the potential presence or absence of contamination in surrounding subsoil directly associated with the regulated units undergoing closure. This effort involved conducting a series of integrity assessments of the containment areas, trench units, condition of epoxy-coated floor seals, concrete floor, berms and pour joints to identify structural cracks and joints that may be potential release pathways. Based on the potential pathway and former use of the Regulated Unit, a soil sampling work plan was developed to characterize the condition beneath these areas. The detailed inspections were conducted to determine the potential presence of identified constituents of concern (COCs) based on potential subsurface pathways through structural cracks and joints. The inspections included visual examinations of the structural integrity of aboveground storage tanks, containment structures, berms, walls, pads, sumps and floors within the regulated areas.

URS identified numerous potential release pathway areas within floor and trench systems after pumping and cleaning accumulated liquids and sediment residues. These areas consisted of observed surface floor cracks and structural construction joints between concrete floor sections and foundation joints along the floor and wall. It was also observed that the concrete floor was in generally good condition. Concrete slab joints were observed to be sealed with an epoxy compound filler and the floor was completely sealed with an epoxy-coat. The CTDEP Guidance and Envirite Closure Plan state that the soil beneath the cracks or joints needs to be sampled to determine if a "release of hazardous waste" exists and, if determined, the extent of the release must be defined. Based on analytical data reviewed to determine decontamination effectiveness and results of visual inspections of structural areas within the Regulated Units (refer to **Figure 3**) subject to the RCRA Closure Plan process, specific areas were identified where a potential subsurface release pathway may exist. Potential areas of concern (PAOCs) were identified are identified in Table 7-1 below:

Table 7-1. Regulated Unit Potential Areas of Concern.

REGULATED UNIT AREA	DESCRIPTION OF REGULATED UNIT PAOC
Acid Tank Area Floor Joints	Structural concrete pad floor joint between the Acid Tank Area concrete pad and outdoor concrete surface along the entire south and west wall. Floor joints are epoxy-sealed. There are numerous tank intake valves for chemical hose connections for waste acid along the Acid Unloading Pad and interior wall joint with associated structural corrosion along the entire length of wall. This represents a potential release pathway.
Acid Tank Area Trench	Trench and sump containment unit in the Acid Tank Area. The trench is completely lined with a coated fiberglass fabric and includes areas of deteriorated concrete underneath. The tank floor includes narrow drainage channels etched within the upper 1-inch surface of the concrete pad that discharge into the trenches. This area is characterized by surface deterioration and represents a potential release pathway.
Acid Unloading Area Drain System	Unsecured concrete pad drain in the Acid Unloading Area which elbows and discharges into the acid trench. The structural joint below the drain and extending along the subsurface pipe represents a potential release pathway.
Alkaline Unloading Area Floor Joints	Structural concrete floor joint between the former outdoor unloading and internal collection sump along the south and west wall. There are four "alkaline" valve connections southeast of the overhead door for chemical hose connections for waste. This area is characterized by an open discharge pipe from the former pad joint and represents a potential release pathway from the drain and pipe connections.
Alkaline Unloading Area Trench	Former concrete pad drain in the former Alkaline Unloading Area discharges to the internal trench near the laboratory that also includes a nearby laboratory sink discharge pipe. This area is characterized by unsecured discharge pipes from the former pad and laboratory and represents a potential release pathway from the drain and pipe connections.
Alkaline Tank Area Trench	Surface cracks and epoxy-sealed joints within the concrete pad sump and trench of the Alkaline Tank Area including narrow channels etched within the upper 1-inch surface of the within the concrete pad that discharge into the trenches. This area is characterized by structural deterioration and represents a potential release pathway. Surface cracks are epoxy-coated and floor joints are epoxy-sealed.
Container Management Area #1	Concrete pad crack along the joint along the floor that extends into the trench along the Container Management Area. This area is characterized by structural deterioration and represents a potential release pathway. Surface cracks are epoxy-coated and floor joints are epoxy-sealed.
Container Management Area #2	Concrete pad crack along the joint along the floor that extends into the trench and into a lower sump along the Container Management Area. This area is characterized by structural deterioration and represents a potential release pathway. Surface cracks are epoxy-coated and floor joints are epoxy-sealed.
Container Unloading-Decanting-Washing Area	Concrete pad joint along the floor that extends into the trench at the Container Unloading and Decanting Area. This area is characterized by structural deterioration and represents a potential release pathway. Surface cracks are epoxy-coated and floor joints are epoxy-sealed.

7.2 Identification of Constituents of Concern

Based on review of records, the constituents of concern (COCs) were identified for potential areas of concern associated with specific Regulated Units. These are identified in the Table 7-2 below:

Table 7-2. Constituents of Concern.

REGULATED UNIT	REGULATED UNIT COCs
Acid Storage Area - Tanks ST1, WT4, B1, VC1, C1, WT1, WT2, WT3 and Trench	Waste acids, metals (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, and petroleum hydrocarbons.
Acid Unloading Area – Concrete Pad and Pipe Connection to Trench	Waste acids, metals (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, and petroleum hydrocarbons.
Alkaline Storage and Processing Area – Tanks NK1, CR1, ER1, SR1, E2, E1, ER2, D1, S2, S1 and VC2 and Trench	Waste alkaline corrosives, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, cyanide, metals (lead, copper, chromium, zinc, nickel), and petroleum hydrocarbons.
Container Management Area #1 and Trench	Waste acids, waste alkaline corrosives, metal hydroxides (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, and petroleum hydrocarbons.
Container Unloading/Decanting/Washing Area and Trench	Waste acids, waste alkaline corrosives, metal hydroxides (lead, copper, chromium, zinc, nickel), spent cupric chloride etchant, hydrochloric acid, cyanide, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, and petroleum hydrocarbons.
Former Alkaline Unloading Area, Pipe Connections and Inlet Discharge Pipe to Trench	Waste alkaline corrosives, copper sulfate, copper ammonium chloride, ammonium chloride etchant, copper oxide, sodium hydroxide, metals (lead, copper, chromium, zinc, nickel), and petroleum hydrocarbons.

7.3 Characterization of Potential Areas of Concern Below Regulated Units

Based on the potential pathway and former use of the Regulated Unit, a soil sampling work plan was developed to identify potential release conditions beneath these areas. Sub-floor soil samples were collected below observed structural surface cracks or concrete floor joints and at the lowest sump collection point within the trench network. Sample collection was accomplished through concrete coring through the floor or trench unit. Soil sample recovery included the use of vibratory coring machinery with dedicated plastic collection core liner inserts. The sample collection from the concrete core was placed a plastic sheet for examination and sample collection.

Sample collection types included concrete core sections and subsoil collected from trench low points and collection sumps along structural joints or cracks in containment areas. These are further described in Table 7-3 below:

Table 7-3. Sample Matrices.

SAMPLE TYPE	DESCRIPTION
Concrete (C)	Concrete chip samples collected from areas where wastes were formerly stored on concrete structures. Concrete chip samples collected from uncoated concrete structures and cracks with concrete core retrievals. Concrete core samples collected through structural floor joints and cracks and trench low points and/or sump collection areas with the trench network located throughout the regulated units.
Soil (S)	Soil samples collected from exposed surface soil areas. In selected areas, using coring or augering techniques, soil samples collected at the surface below the concrete plug at 3-inches, 6-inches and 12-inches from the same auger hole

The sample identification for the container label and chain-of-custody were based on the project system to track the source, type and event sequence. Each sample was labeled with the project site prefix "ENV" followed by the source area and matrix and then numbered sequentially.

Soil samples were recovered from the upper sub-soil interval (0 to 12-inch depth interval) in contact with the underlying concrete pad below the floor joint or crack and at the lower trench sumps. The upper 6-inch sample within the core interval in direct contact with the sub-slab was collected in 8-ounce glass containers for laboratory analysis. Concrete core sections through joints and cracks were recovered for physical examination and secured for subsequent evaluation. The concrete floor slab thickness ranged from 5 to 11 inches. The depth of the trenches was 24 inches. Sumps within the trenches were approximately 1 foot square by 6 inches deep. Sample points and locations are identified in the Table 7-4 below.

Table 7-4. Sample Point Identification.

PAOC NAME	URS SAMPLE ID	SAMPLE POINT	SAMPLE LOCATION
Alkaline Unloading Area Floor Joint and Outlet Pipe	**EN-501**	**B 1**	Sump Containment No. 2 – Adjacent to the concrete floor joint along the south wall under four "alkaline" valve connections and discharge outlet pipe extending from the former Alkaline Unloading Pad drain.
Alkaline Unloading Area Trench Sump	**EN-502**	**B 2**	Sump Containment No. 2 – At the trench sump from the former concrete pad drain of the former Alkaline Unloading Area and laboratory sink discharge pipe.
Container Unloading and Decanting Area	**EN-503**	**B 3**	Trench Drain No. 2 - Within the concrete pad joint and crack along the Container Unloading and Decanting Area.
Container Management Area No. 2	**EN-504**	**B 4**	Trench Drain No. 2 - Within the concrete pad joint and crack along the Container Management Area.
Container Management Area No. 1	**EN-505**	**B 5**	Sump Containment No. 1 – Within the containment area at the lowest section near the trench sump along the Container Management Area.
Alkaline Storage & Processing Tank Area Berm	**EN-506**	**B 6**	Alkaline Storage Tank Containment Berm - Adjacent to former Tank SR-1 and the concrete berm within concrete floor joint and cracks in the Alkaline Storage Tank area.
Alkaline Storage & Processing Tank Area	**EN-507**	**B 7**	Alkaline Storage Tank Floor - Adjacent former Tank ER-1 and the catwalk support leg within concrete floor joint and cracks in the Alkaline Storage Tank area.
Alkaline Storage & Processing Tank Area Trench Sump	**EN-508**	**B 8**	Sump Containment No. 4 - Within the containment area at the lowest section near the sump in the sump containment trench between Tanks VC-2 and ER-2.
Alkaline Storage & Processing Tank Area Trench	**EN-509**	**B 9**	Trench Drain No. 4 - Within joint and cracks in the concrete trench and at narrow drainage channels etched within the concrete pad at Tanks S-1 and S-2.
Alkaline Storage & Processing Tank Area Trench – Filter Press	**EN-510**	**B 10**	Sump Containment No. 5 - Within the concrete pad joint and crack along former location of the Filter Press Unit.
Acid Tank Storage Area Trench	**EN-511**	**B 11**	Trench Drain No. 3 - Inside concrete trench lined with fiberglass fabric within floor joint and at etched drainage channels that discharge into the trenches from the tank storage area.
Acid Tank Storage Area Sump	**EN-512**	**B 12**	Sump Containment No. 3 - Adjacent to the concrete floor joint along the south wall under "acid" valve connections and discharge outlet pipe extending from the Acid Unloading Pad drain.
Acid Tank Storage Area Trench Sump	**EN-513**	**B 13**	Sump Containment No. 3 - Within the containment area at the lowest section near the trench sump within the acid storage tank area.

PAOC NAME	URS SAMPLE ID	SAMPLE POINT	SAMPLE LOCATION
Acid Tank Storage Area Floor Joint	**EN-514**	**B 14**	Acid Storage Area Valves - Adjacent to the concrete floor joint and cracks along the south wall near valve connections from the Acid Unloading Pad.
Acid Tank Storage Area Floor Joint	**EN-515**	**B 15**	Acid Storage Area Floor - Within concrete floor joint between former acid storage tanks.
Acid Tank Area Floor Berm	**EN-516**	**B 16**	Acid Storage Area Containment Berm - Within concrete floor joint at the concrete containment berm.
Acid Unloading Area Drain System	**EN-517**	**B 17**	Acid Unloading Pad - At concrete pad drain elbow in the Acid Unloading Area.
Alkaline Unloading Pad Drain	**EN-518**	**B 18**	Alkaline Unloading Pad – Adjacent to the concrete pad drain in the former Alkaline Unloading Area and discharge pipe extending to Sump Containment No. 2.

7.4 Laboratory Methods For Regulated Units

Following determination of Constituents of Concern (COCs), appropriate analytical methodologies were selected for total mass results. Analytical methods included the following in Table 7-5:

Table 7-5. Analytical Laboratory Methods.

PARAMETER	METHOD
Acid/Alkalinity – Soil Corrosivity (aqueous)	Field screening – pH Test Strips (Range 2 to 12)
Metals - Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Copper, Nickel and Zinc	EPA Method 6010B and 7441A for Mercury only
Total Petroleum Hydrocarbons	CT DEP Extractable Procedure
Corrosivity (pH)	EPA Method 9040B/150.1
Total/Reactivity Cyanide	EPA Method 335.2/9010B
Total/Reactivity Sulfide	EPA Method 376.2/9030B
Specific Conductance	Standard Methods

7.5 Field Observations

Concrete coring and sub-slab soil sample recovery was conducted by URS on December 2 and December 5, 2005. The observed conditions of the concrete core and subslab soil are summarized in Table 7-6 below:

Table 7-6. Sample Point Observations.

PAOC NAME	SAMPLE POINT	OBSERVATIONS CONCRETE CORES and SUBSLAB SOIL
Alkaline Unloading Area Trench Floor Joint and Outlet Pipe	**B 1**	Concrete Core Condition: No cracks through 6-inch core section. Subslab Soil: Fine-to-medium moist brown sand. Refusal at 2 feet below finished floor grade. No chemical residues observed.
Alkaline Unloading Area Trench Sump	**B 2**	Concrete Core Condition: No cracks through 9.5-inch core section. Subslab Soil: Fine-to-medium moist brown sand. Refusal at 1.3 feet below finished floor grade. No chemical residues observed.
Container Unloading and Decanting Area Trench	**B 3**	Concrete Core Condition: No cracks through 7-inch core section. Subslab Soil: Brown sand and gravel. Refusal at 2.1 feet below finished floor grade. No chemical residues observed.
Container Management Area No. 2 Trench	**B 4**	Concrete Core Condition: No cracks through 7-inch core section. Subslab Soil: Brown sand and gravel. Refusal at 1.6 feet below finished floor grade. No chemical residues observed.
Container Management Area No. 1 Trench Sump	**B 5**	Concrete Core Condition: No cracks through 10-inch core section. Subslab Soil: Brown sand and gravel. Refusal at 1.3 feet below finished floor grade. No chemical residues observed.
Alkaline Storage & Processing Tank Area Berm	**B 6**	Concrete Core Condition: Complete longitudinal crack through entire 11-inch core section. Intersection of radial floor cracks and joint. Subslab Soil: Brown sand and gravel. Refusal at 2.4 feet below finished floor grade. No chemical residues observed.
Alkaline Storage & Processing Tank Floor Area	**B 7**	Concrete Core Condition: Complete longitudinal crack through entire 8.5-inch core section. Intersection of radial floor cracks and joint. Subslab Soil: Brown sand and gravel with trace black residues and red metal fragments; 6 inch rusted metal piece. Refusal at 1.7 feet below finished floor grade.
Alkaline Storage & Processing Tank Area Trench Sump	**B 8**	Concrete Core Condition: No cracks through 6-inch core section. Subslab Soil: Light sand and gravel underlain by brown fine sand and pebbles; mica fragments in bottom of sampler. Refusal at 2.0 feet below finished floor grade. No chemical residues observed.
Alkaline Storage & Processing Tank Area Trench	**B 9**	Concrete Core Condition: No cracks through 5-inch core section. Subslab Soil: Brown sand and gravel; rock fragments. Refusal at 1.0 foot below finished floor grade. No chemical residues observed.

PAOC NAME	SAMPLE POINT	OBSERVATIONS CONCRETE CORES and SUBSLAB SOIL
Alkaline Storage & Processing Tank Area Trench – Filter Press	**B 10**	Concrete Core Condition: No cracks through 7-inch core section. Trench 6-inch depth due to concrete layer over original trench. Subslab Soil: Brown sand and gravel. Refusal at 1.6 feet below finished floor grade. No chemical residues observed.
Acid Tank Storage Area Trench	**B 11**	Concrete Core Condition: No cracks through 7-inch core section. Trench lined with epoxy-coated fiberglass coat. Subslab Soil: Brown sand and gravel. Refusal at 1.1 feet below finished floor grade. No chemical residues observed.
Acid Tank Storage Area Sump	**B 12**	Concrete Core Condition: Complete lateral crack across the plane of the 6-inch concrete core resulting in a 2-inch and 4-inch section. Trench lined with epoxy-coated fiberglass coat. Subslab Soil: Brown sand and gravel. Refusal at 1.1 feet below finished floor grade. No chemical residues observed.
Acid Tank Storage Area Trench Sump	**B 13**	Concrete Core Condition: No cracks through 10.5-inch core section. Trench lined with epoxy-coated fiberglass coat. Subslab Soil: Brown sand and gravel. Refusal at 1.4 feet below finished floor grade. No chemical residues observed.
Acid Tank Storage Area Floor Joint	**B 14**	Concrete Core Condition: No cracks through 6-inch core section. Subslab Soil: Brown sand and gravel. Refusal at 2.5 feet below finished floor grade. No chemical residues observed.
Acid Tank Storage Area Floor Joint	**B 15**	Concrete Core Condition: Partial 2-inch longitudinal crack through the upper 2-inch core section. Intersection of radial floor crack and joint. Subslab Soil: Brown sand and gravel. Refusal at 1.5 feet below finished floor grade. No chemical residues observed.
Acid Tank Area Floor Berm	**B 16**	Concrete Core Condition: Complete longitudinal crack through entire 6-inch core section. Intersection of radial floor crack and joint. Subslab Soil: Brown sand and gravel. Refusal at 1.8 feet below finished floor grade. No chemical residues observed.
Acid Unloading Pad Drain	**B 17**	Concrete Core Condition: No cracks through 4-inch core section. Subslab Soil: Fine light brown fine sand. No chemical residues observed.
Alkaline Unloading Pad Drain	**B 18**	Concrete Core Condition: No cracks through 3-inch bituminous asphalt layer over 4-inch core section. Subslab Soil: Fine light brown fine sand. No chemical residues observed.

7.6 Discussion of Analytical Laboratory Results

Sub-slab samples were submitted to EAS Laboratories of Watertown, Connecticut.[7] Samples within the upper 6-inches of the recovery interval in direct contact with the concrete sub-slab were analyzed for the selected parameters. Analytical data are indicators of potential release pathways from trench low points and collection sumps along structural joints or cracks in containment areas. This section presents results of the investigation pertaining to subsoil samples collected below each concrete core. Analytical results are evaluated on the basis of an initial comparison to the Media Closure Criteria (MCC) that consists of the Connecticut Remediation Standard Regulations (Industrial/Commercial Direct Exposure Criteria for Metals[8]) and RCRA Hazardous Waste Characteristics (Corrosivity and Cyanide/Sulfide Reactivity). As presented in Table 7-7 below, although there were slightly elevated concentrations of some COCs, there were no exceedances of MCC.

Table 7-7. Interpretation of Analytical Results.

PAOC NAME	URS SAMPLE ID	SAMPLE POINT	INTERPRETATION OF ANALYTICAL RESULTS SUBSLAB SOIL
Alkaline Unloading Area Trench Floor Joint and Outlet Pipe	**EN-501**	**B1-S1**	Corrosivity - pH Range: Slightly Alkaline. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Unloading Area Trench Sump	**EN-502**	**B2-S1**	Corrosivity - pH Range: Slightly Alkaline. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Container Unloading and Decanting Area Trench	**EN-503**	**B3-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Container Management Area No. 2 Trench	**EN-504**	**B4-S1**	Corrosivity - pH Range: Slightly Alkaline. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.

[7] EAS Certifications – Connecticut PH0558 and NELAC.

[8] Media Closure Criteria for metals are based on the Industrial/Commercial Direct Exposure Criteria of Connecticut Remediation Standard Regulations since an Environmental Land Use Restriction will be applied in a manner consistent with the adjoining solid waste landfill closure.

PAOC NAME	URS SAMPLE ID	SAMPLE POINT	INTERPRETATION OF ANALYTICAL RESULTS SUBSLAB SOIL
Container Management Area No. 1 Trench Sump	**EN-505**	**B5-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Storage & Processing Tank Area Berm	**EN-506**	**B6-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Storage & Processing Tank Floor Area	**EN-507**	**B7-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Storage & Processing Tank Area Trench Sump	**EN-508**	**B8-S1**	Corrosivity - pH Range: Slightly Acidic. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Storage & Processing Tank Area Trench	**EN-509**	**B9-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Storage & Processing Tank Area Trench – Filter Press	**EN-510**	**B10-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC (Elevated concentration of Lead only). Extractable Total Petroleum Hydrocarbons: Slightly elevated concentration. Concentrations less than MCC. Reactive Sulfide: Slightly elevated concentration.
Acid Tank Storage Area Trench	**EN-511**	**B11-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Reactive Sulfide: Slight elevation detected. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Acid Tank Storage Area Sump	**EN-512**	**B12-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Acid Tank Storage Area Trench Sump	**EN-513**	**B13-S1**	Corrosivity - pH Range: Slightly Alkaline. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Acid Tank Storage Area Floor Joint	**EN-514**	**B14-S1**	Corrosivity - pH Range: Slightly Acidic. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.

PAOC NAME	URS SAMPLE ID	SAMPLE POINT	INTERPRETATION OF ANALYTICAL RESULTS SUBSLAB SOIL
Acid Tank Storage Area Floor Joint	**EN-515**	**B15-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Acid Tank Area Floor Berm	**EN-516**	**B16-S1**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Acid Unloading Pad Drain	**EN-517**	**B17-S2**	Corrosivity - pH Range: Slightly Acidic. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.
Alkaline Unloading Pad Drain	**EN-518**	**B18-S2**	Corrosivity - pH Range: Neutral. Metals: Concentrations less than MCC. Extractable Total Petroleum Hydrocarbons: Concentrations less than MCC.

A summary of analytical results is included in **Appendix G - Table 7-8**. Complete laboratory results are included in **Appendix H**. See Report No. EAS05120063-01 to EAS05120063-18.

7.7 Conclusions of the Integrity Assessment

Based on results of the integrity assessment, URS has prepared the following conclusions and recommendation for consideration by Envirite.

1. Under the approved Envirite RCRA Closure Plan and CTDEP RCRA closure guidance, URS completed the integrity assessment of the Regulated Units that evaluated the containment areas, trench and sump units, condition of epoxy-coated floor seals, concrete floor, berms and pour joints to identify structural cracks and/or joints determined to be potential release pathways. URS identified numerous potential release pathway areas within floor and trench systems after pumping and cleaning accumulated liquids and sediment residues. These areas consisted of observed surface floor cracks and structural construction joints between concrete floor sections and foundation joints along the floor and wall. It was also observed that the concrete floor was in generally good condition. Concrete slab joints were observed to be sealed with epoxy compound filler and the floor was completely sealed with an epoxy-coat.

2. Based on potential pathways and former uses of the Regulated Units, concrete core sections and subslab base soils beneath the observed surface cracks, construction joints and/or lowest containment sumps were examined and sampled. The investigation was designed to characterize the integrity of the concrete section and determine if identified constituents of concern had migrated to the subsurface soil through these potential structural pathways.

3. Based on results of the integrity inspections and associated subsoil sampling of potential subsurface release pathways within the RCRA Regulated Units, exceedances of MCC were not detected within the targeted sampling locations in concrete slab subsoil immediately below the identified potential pathways. Low concentrations of metals included cadmium, chromium, copper, lead, nickel and zinc were detected in the Alkaline Storage and Processing Area (Sump Containment No. 5), Filter Press Area (Sump Containment No. 5) and in the Acid Storage Area, but concentrations were significantly below the MCC. Low concentrations of Total Petroleum Hydrocarbons were also detected in the Filter Press Area (Sump Containment No. 5), but this concentration was also significantly below the MCC. In structural cracks and concrete construction joints, chemical precipitate or discoloration was not observed in any of the concrete core sections or in the slab subsoil.

4. Based the current regulatory status of the site inclusive of the closed contiguous landfill, URS recommends no further characterization of concrete slab subsoil. Observed site conditions based on the integrity assessments indicate that further investigation and remediation is not necessary to complete the closure process. In order to assure a consistent and coordinated regulatory approach, an appropriate course of action for consideration consists of incorporating the building and land associated with the RCRA Regulated Units with the ongoing program requirements of Section 3008(h) of the Resource Conservation and Recovery Act, 42 U.S.C. §6928(h) for the entire property.

8.0 CERTIFICATION OF CLOSURE

The former Envirite Corporation hazardous waste facility, as applicable, has been closed in accordance with the specifications in the Envirite Closure Plan July (1994, Rev. 2B) identified as "Attachment C" of the RCRA Part B Operating Permit No. DEP/HWM-140-024, approved by the U.S. Environmental Protection Agency and Connecticut Department of Environmental Protection. The Closure Plan was updated by URS Corporation AES in June 2002 and implemented in a series of six (6) site-specific Closure Plan Amendments prepared for the Regulated Units. The facility Closure Plan and amendments were prepared, as applicable, in accordance with requirements of the RCRA Hazardous Waste Management regulations (40 CFR Part 264 Subpart G), R.C.S.A. §22a-449(c)-104 and C.G.S. §22a-454(a) which includes by reference the "RCRA Closure Plan Guidance for Container Storage Areas and Tank Systems" (Draft November 1993) prepared by the CTDEP.

_____
Printed Name of Registered Professional Engineer
URS Corporation AES, Rocky Hill, CT

_____
Signature of Registered Professional Engineer

Registration No: _____ State: **CT**

Date: _____

(Seal)

_____
Gary P. Alicandro, CHMM #0448, CT DEP LEP No, 211
Senior Project Manager
URS Corporation AES, Rocky Hill, CT

Date: _____

_____
Geoffrey Stengel, Jr.
Envirite Corporation
Blue Bell, PA

Date: _____

8.0 CERTIFICATION OF CLOSURE

The former Envirite Corporation hazardous waste facility, as applicable, has been closed in accordance with the specifications in the Envirite Closure Plan July (1994, Rev. 2B) identified as "Attachment C" of the RCRA Part B Operating Permit No. DEP/HWM-140-024, approved by the U.S. Environmental Protection Agency and Connecticut Department of Environmental Protection. The Closure Plan was updated by URS Corporation AES in June 2002 and implemented in a series of six (6) site-specific Closure Plan Amendments prepared for the Regulated Units. The facility Closure Plan and amendments were prepared, as applicable, in accordance with requirements of the RCRA Hazardous Waste Management regulations (40 CFR Part 264 Subpart G), R.C.S.A. §22a-449(c)-104 and C.G.S. §22a-454(a) which includes by reference the "RCRA Closure Plan Guidance for Container Storage Areas and Tank Systems" (Draft November 1993) prepared by the CTDEP.

Paul F. Schmidt
Printed Name of Registered Professional Engineer
URS Corporation AES, Rocky Hill, CT

Paul F. Schmidt
Signature of Registered Professional Engineer

Registration No: 10810 State: CT

(Seal)

Date: 5/30/07

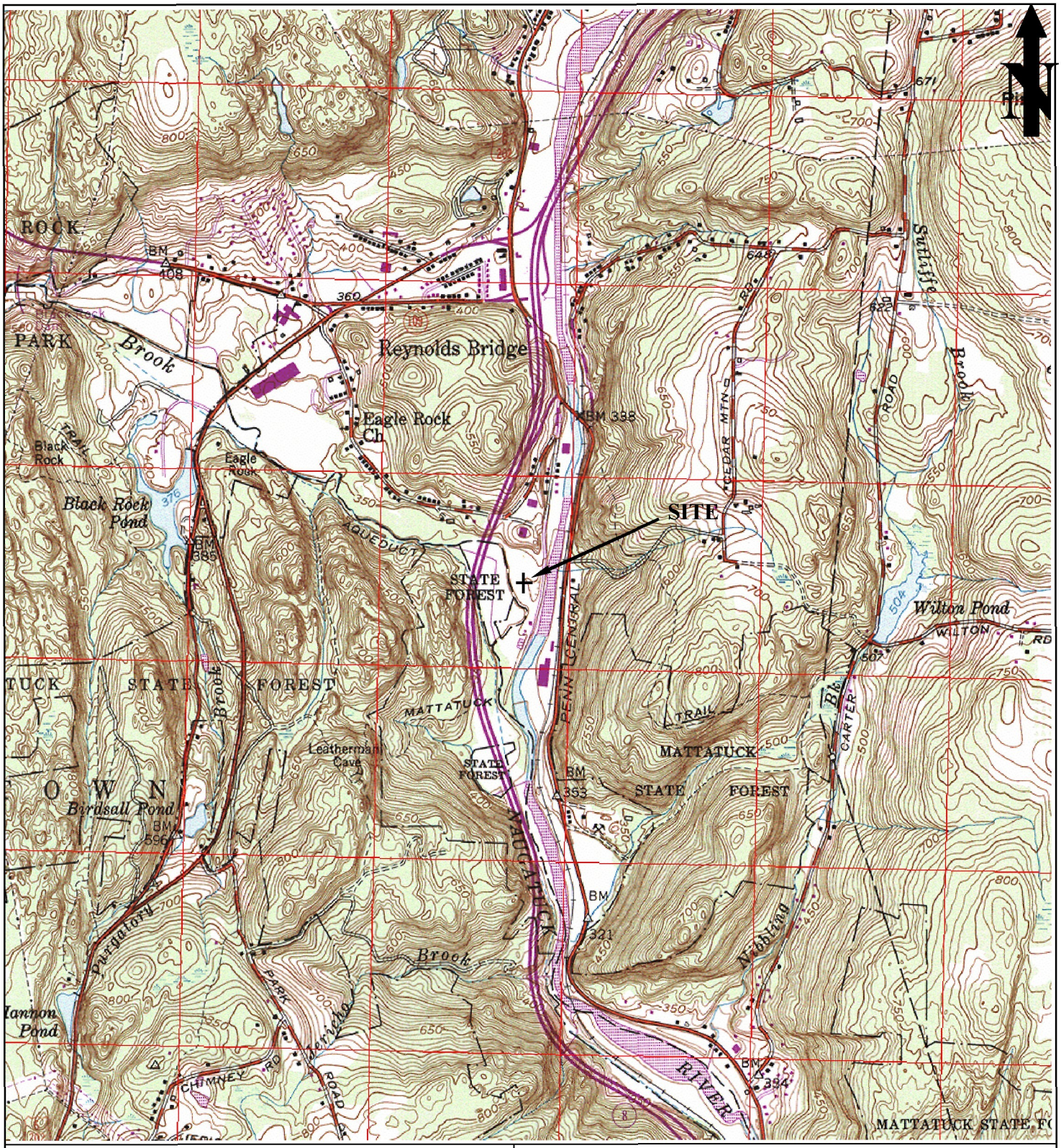
Gary P. Alicandro, CHMM #0448, CT DEP LEP No, 211
Senior Project Manager
URS Corporation AES, Rocky Hill, CT

Date: 5/30/07

Geoffrey Stengel, Jr.
Envirite Corporation
Blue Bell, PA

Date: 6/4/07

FIGURES



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Longitude: 73° 4’ 46” W

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Northing 4612318mN

Scale: 0 1/2 1 MILE
0 1000 FEET 0 500m 1000m

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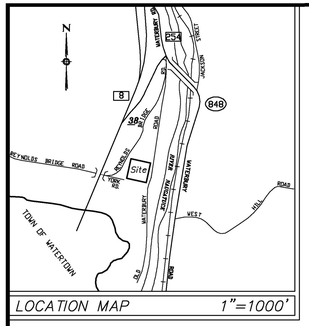
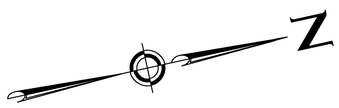
Figure 1
Site Location Map

Former Envirite Corporation
Hazardous Waste Facility
Formerly Pure-Etch Company of Connecticut, Inc.
Thomaston, Connecticut

Job No.: 36935792

URS Corporation AES





LEGEND

- Bush
- Catch Basin
- Coniferous Tree
- Deciduous Tree
- GG Gas Gate
- Hydrant
- Light Pole
- Mailbox
- Manhole
- Parking Meter
- Sign
- Utility Pole
- WG Water Gate
- Monitoring Well
- Boring

Conc. Retaining Wall
Bituminous Pavement
F-9
F-8
CB
Concrete
CO_2 Tank
Lime Silo
Conc.
Gate
F-11
F-6
Metal Post
F-10
Gate
Conc.
Conc.
Conc. Retaining Wall
Edge of Pavement
Grass
Metal I-Beams
Annex Building No.3
Pipes
Valves
Fountain
Concrete
Main Plant – Building No.1
WASTE MANAGEMENT + PROCESSING AREA
Conc.Pad
Anhydrous-Ammonia Tank (Removed)
Gate
Metal Post
G-7
Door
Conc.Pad
Bituminous Pavement
Cooling Tower
Elec. Switch
BOILER ROOM
Metal Post
Waste Drums
Pipe
Pipe (To A.C.)
UST Vent
Faucet Vent
Elec. Box
Gas Service
Conduit
Elec. Meter
PVC
W-04
Annex Building No.2
Door
Fan
Vent
PROCESS CONTROL LAB
Bit. Walk
Door
Conc. Pad w/A.C.Unit
12"
UST
Boulder
Bush
Boulder
6"
6"
Bit. Walk
Planted
TESTING LAB
OFFICE
Door
Conc. Pad w/Oil Filler
4"
Metal Box
Entrance
Planted
Steps
Planted
Edge of Planted Area
Conc.Pad w/Trans.
Flag Pole
Bushes
Metal Post (Typ.)
Truck Scale
Conc.
Bushes
Control Panel
Bituminous Parking Lot
Plant Effluent
6"PVC
W-20
3"
3"Twin
3"Twin
3"Twin
3"Twin
3"Triple
4"
3"Twin
W-02
W-23
W-38
W-24
Gate
18"
20"
18"
Plant Effluent
Grass
Bushes
24"
Chain Link Fence
Gate
Chain Link Fence
MH (Sewer)
WG
GG
2"
1"
2"
2"
GG
GG
MH (Sewer)
OLD WATERBURY ROAD
SNET 1419
Overhead Wires (Typ.)
Wood Post (Underground Gas)
6"PVC
6"PVC
Pressure Release
SNET 1418 w/Riser
6"CMP
NAUGATUCK RIVER
(CLOSED LANDFILL)
(CLOSED LANDFILL)
Grass

20 10 0 20 40 60
GRAPHIC SCALE

NOTES:

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THRU 20-300b-20, AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THIS IS A COMPILATION PLAN PREPARED TO CLASS D STANDARDS. THIS PLAN WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
2. REFERENCE IS MADE TO PLAN ENTITLED "SITE PLAN ENVIRITE CORPORATION THOMASTON CONNECTICUT", BY FUSS & O'NEILL INC., SCALE 1"=40', DATED NOVEMBER 1988, REVISED TO 11-2-89.

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

S:\Envirite\36935792\cad\Fig.2_6-25-02.dwg

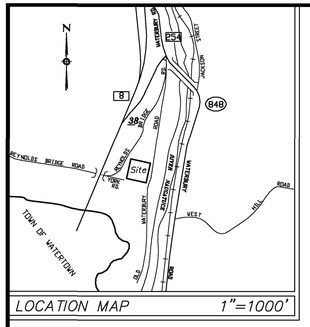
ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

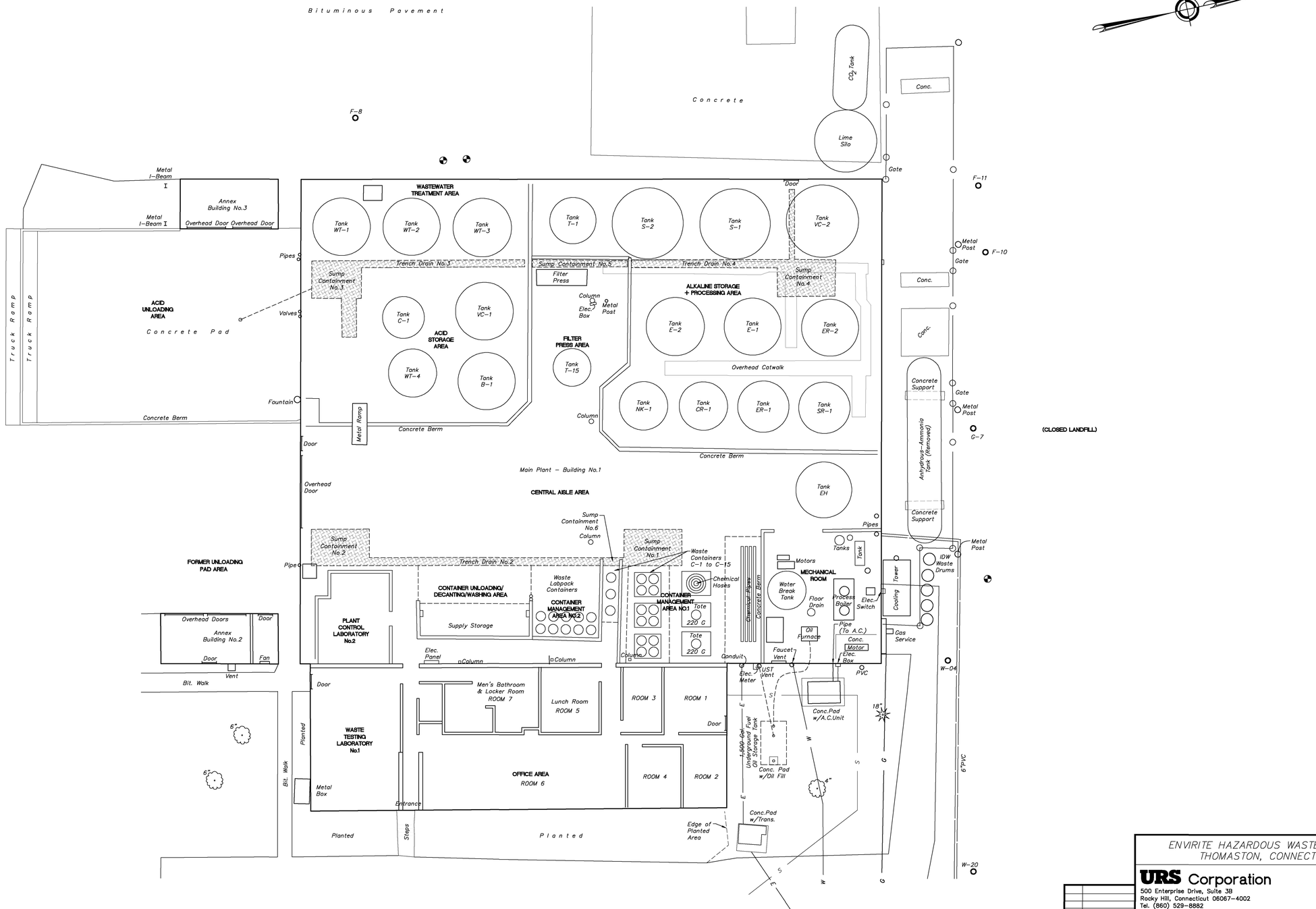
SITE PLAN

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 20' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 2



LOCATION MAP 1"=1000'



10 5 0 10 20 30

GRAPHIC SCALE

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

FACILITY WASTE MANAGEMENT & PROCESSING AREAS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 3

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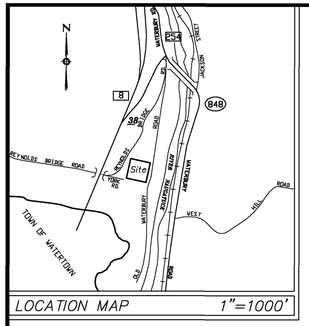

LOCATION MAP 1"=1000'

LEGEND

- 3 Emergency Exit Points
- ▲ Site Monitoring Points
- WLCL Work Limit Control Line

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 1
SITE WORK ZONE CONTROL PLAN
FOR ALKALINE PROCESSING TANKS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 4-1

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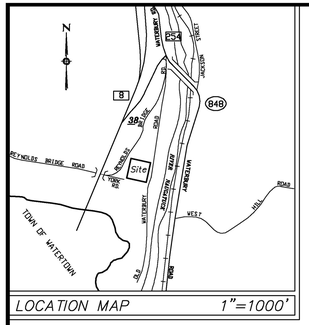

LOCATION MAP 1"=1000'

LEGEND

- 3 Emergency Exit Points
- Site Monitoring Points
- WLCL Work Limit Control Line

Bituminous Pavement

Concrete

CO_2 Tank

Lime Silo

Conc.

F-8

Metal I-Beam

Annex Building No.3

Overhead Door Overhead Door

Truck Ramp

Truck Ramp

ACID UNLOADING AREA

Concrete Pad

Valves

Pipes

WASTEWATER TREATMENT AREA

Tank WT-1

Tank WT-2

Tank WT-3

Trench Drain No.3

Sump Containment No.3

Tank C-1

Tank VC-1

ACID STORAGE AREA

Tank WT-4

Tank B-1

Fountain

Concrete Berm

Metal Ramp

Door

Sump Containment No.5

Filter Press

Column

Elec. Box

Metal Post

Tank T-1

Tank S-2

Tank S-1

Tank VC-2

Door

Trench Drain No.4

Sump Containment No.4

ALKALINE STORAGE & PROCESSING AREA

Tank E-2

Tank E-1

Tank ER-2

Overhead Catwalk

FILTER PRESS AREA

Tank T-15

Tank NK-1

Tank CR-1

Tank ER-1

Tank SR-1

Column

Concrete Berm

Tank EH

Entrance To Work Zones

Exit To URS Trailer

Main Plant – Building No.1

Overhead Door

SUPPORT ZONE 1 (VEHICLE ACCESS)

CENTRAL AISLE AREA

CONTAMINATION REDUCTION & LOADING ZONE

SUPPORT ZONE 2 (EQUIPMENT AREA)

Sump Containment No.2

Sump Containment No.6

Column

Sump Containment No.1

Trench Drain No.2

Pipes

Waste Containers C-1 to C-15

Chemical Hoses

Tanks

Tank

Motors

MECHANICAL ROOM

Water Break Tank

Floor Drain

Process Boiler

Elec. Switch

Cooling Tower

Chemical Pipes

Concrete Berm

CONTAINER UNLOADING/ DECANTING/WASHING AREA

Waste Labpack Containers

CONTAINER MANAGEMENT AREA NO.2

CONTAINER MANAGEMENT AREA NO.1

Tote 220 G

Tote 220 G

Supply Storage

PLANT CONTROL LABORATORY No.2

Elec. Panel

Column

Column

Conduit

Pipe (To A.C.)

Oil Furnace

Conc. Motor

Elec. Box

Gas Service

Faucet Vent

Elec. Meter

UST Vent

PVC

Overhead Doors

Annex Building No.2

Door

Door

Fan

Vent

Bit. Walk

Men's Bathroom & Locker Room ROOM 7

Lunch Room ROOM 5

ROOM 3

ROOM 1

Door

Conc.Pad w/A.C.Unit

18"

Underground Fuel Oil Storage Tank

Conc. Pad w/Oil Fill

4"

WASTE TESTING LABORATORY No.1

Planted

Bit. Walk

OFFICE AREA ROOM 6

ROOM 4

ROOM 2

Metal Box

Entrance

Steps

Planted

Planted

Edge of Planted Area

Conc.Pad w/Trans.

6"

6"

Cellular Telephone

First Aid Station

URS Field Trailer

All Vehicles Must Sign Out At Trailer

Port-O-Let

Concrete Support

Anhydrous-Ammonia Tank (Removed)

Concrete Support

Metal Post

IDW Waste Drums

Gate

F-11

Metal Post

F-10

Gate

Conc.

Conc.

Gate

Metal Post

G-7

W-04

6" PVC

W-20

WORK LIMIT CONTROL LINE
Work Activities Restricted Within Work Limit Control Line. Activities Outside WLCL NOT PRMITTED.

Direct Spills And Decon Wastewater To Trench Drain No.2, Sump Containment No.6 Or Sump Containment No.1.

EXCLUSION ZONE

Container Management Area No.1 : Waste Alkaline Containers

Interim Container Management Area No.3 : Waste Acid Containers

Container Management Area No.2 : Discarded Laboratory Chemical Containers

10 5 0 10 20 30
GRAPHIC SCALE

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 2
SITE WORK ZONE CONTROL PLAN
FOR CONTAINER REMOVAL

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 4-2

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COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 3
SITE WORK ZONE CONTROL PLAN
FOR ALKALINE STORAGE TANKS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
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PROJECT No. 36935792
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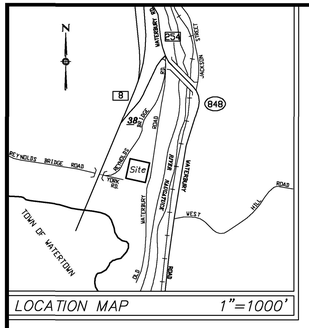

LOCATION MAP 1"=1000'

LEGEND

- 3 Emergency Exit Points
- Site Monitoring Points
- WLCL Work Limit Control Line

Bituminous Pavement

Concrete

CO_2 Tank

Lime Silo

Conc.

Gate

F-11

Metal Post

F-10

Gate

Conc.

Conc.

Concrete Support

Gate

Metal Post

G-7

Anhydrous-Ammonia Tank (Removed)

Concrete Support

Metal Post

IDW Waste Drums

Tanks

Tank

Towers

Cooling

Motors

MECHANICAL ROOM

Water Break Tank

Floor Drain

Process Boiler

Elec. Switch

Oil Furnace

Pipe (To A.C.)

Gas Service

Duct Motor

Elec. Box

Conduit

Elec. Meter

UST Vent

Faucet

Vent

W-04

PVC

6" PVC

W-20

EXCLUSION ZONE No.1
Acid Storage Tank Area

EXCLUSION ZONE No.2
Acid Unloading Area

F-8

6 Pipe Bank Configuration
○○○ Above
○○○ Below

To Roof

WLCL

To Outside

WASTEWATER TREATMENT AREA

Tank WT-1

Tank WT-2

Tank WT-3

Tank D-1

Tank S-2

Tank S-1

Tank VC-2

Door

Metal I-Beam

Annex Building No.3

Overhead Door

Overhead Door

3 Pipe Bank Configuration
○○○ Stacked

3"(S-2)
3"(S-1)
3"Caustic

Pipes

Filter

WLCL

Truck Ramp

Truck Ramp

ACID UNLOADING AREA

Concrete Pad

Valves

3"

Sump Containment No.3

6" Vent

Pump

Pump

Tank C-1

Tank VC-1

ACID STORAGE AREA

Tank WT-4

Tank B-1

Trench Drain No.3

Sump Containment No.5

Filter Press

Trench Drain No.4

Sump Containment No.4

ALKALINE STORAGE & PROCESSING AREA

Column

Elec. Box

Metal Post

Tank E-2

Tank E-1

Tank ER-2

Overhead Catwalk

FILTER PRESS AREA

Tank T-15

Tank NK-1

Tank CR-1

Tank ER-1

Tank SR-1

Fountain

Concrete Berm

Column

Metal Ramp

Trench Drain

CONTAMINATION REDUCTION ZONE

3 Door

Concrete Berm

Entrance To Work Zones

Main Plant – Building No.1

Overhead Door

SUPPORT ZONE 1
(VEHICLE ACCESS)

CENTRAL AISLE AREA

Tote 220 G

Tote 220 G

Tank EH

Pipes

3"Steel

2"(C-1)

Sump Containment No.6

Column

Sump Containment No.2

SUPPORT ZONE 2
(EQUIPMENT AREA)

Sump Containment No.1

Trench Drain No.2

Pipes

Exit To URS Trailer

1.5"Drain From Lab

PLANT CONTROL LABORATORY No.2

CONTAINER UNLOADING/ DECANTING/WASHING AREA

C-1
S-1

CONTAINER MANAGEMENT AREA NO.2

CONTAINER MANAGEMENT AREA NO.1

SURPLUS EQUIPMENT

Supply Storage

Elec. Panel

Column

Column

Overhead Doors

Annex Building No.2

Door

Door

Fan

Vent

Bit. Walk

2 Door

Men's Bathroom & Locker Room ROOM 7

Lunch Room ROOM 5

ROOM 3

ROOM 1

Door

WASTE TESTING LABORATORY No.1

OFFICE AREA ROOM 6

ROOM 4

ROOM 2

1

Entrance

Steps

Planted

Planted

Planted

Edge of Planted Area

Bit. Walk

Metal Box

1,600-Gal. Underground Fuel Oil Storage Tank

Conc. Pad w/Oil Fill

Conc.Pad w/A.C.Unit

Conc.Pad w/Trans.

18"

4"

6"

6"

Cellular Telephone

First Aid Station

URS Field Trailer

All Vehicles Must Sign Out At Trailer

Port-O-Let

WORK LIMIT CONTROL LINE (WLCL)
Work Activities Restricted Within Work Limit Control Line. Activities Outside WLCL NOT PERMITTED.

EXCLUSION ZONE No.3
Tank EH Area.

CONTAMINATION REDUCTION ZONE
Temporary Storage For Containers And Tanks.

STAGING AREA
For Dismantled And Decontaminated Acid Tank Pipes.

STAGING AREA
For Dismantled And Decontaminated Alkaline Tank Pipes.

10 5 0 10 20 30
GRAPHIC SCALE

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 4
SITE WORK ZONE CONTROL PLAN
FOR ACID STORAGE TANKS & ACID UNLOADING AREA

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 4-4

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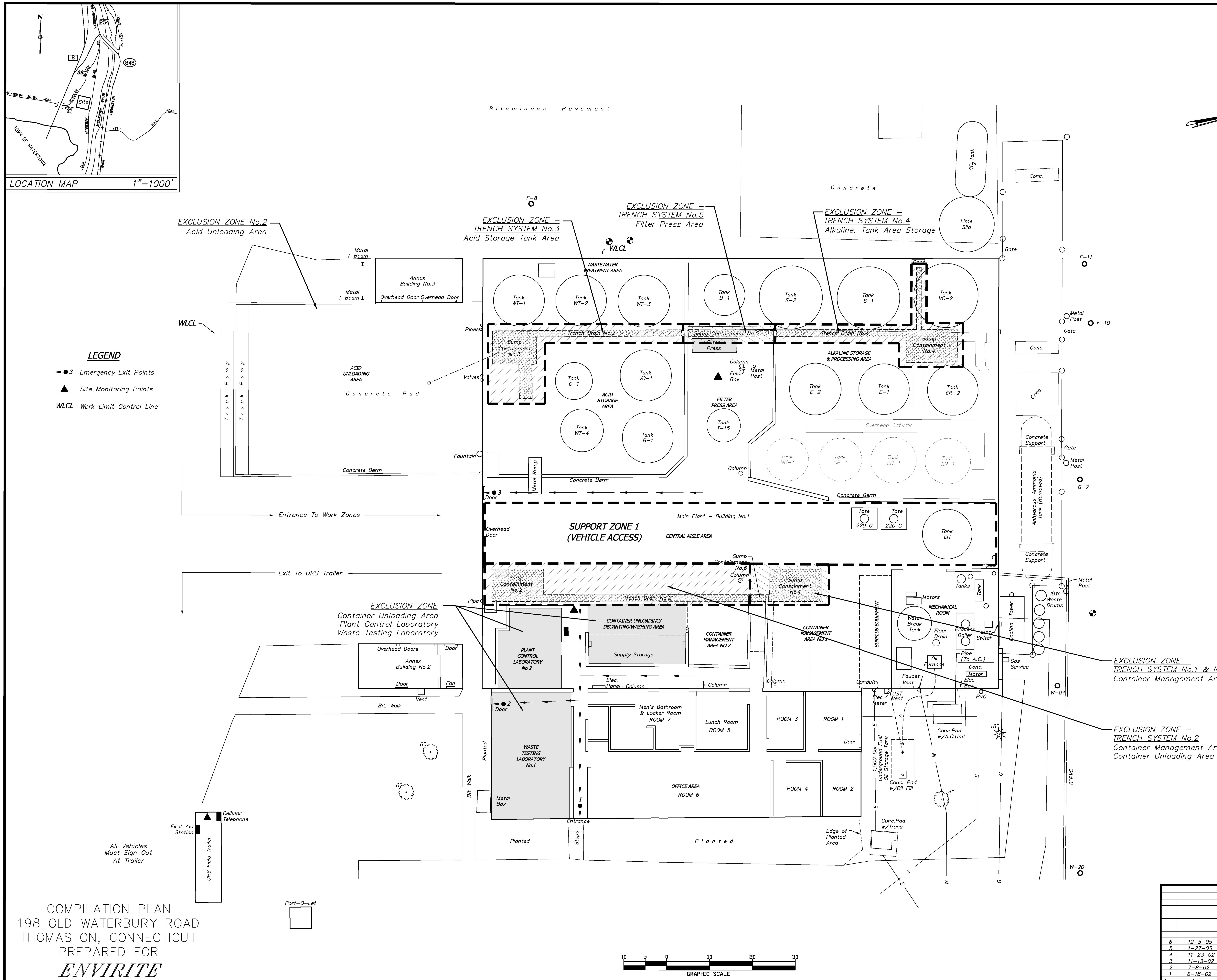

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 5
SITE WORK ZONE CONTROL PLAN FOR
TRENCH SYSTEMS AND CONTAINER PROCESSING AREAS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN: | SCALE: 1"= 10' | DATE: 2/11/02 | DRAWING No. 4-5
APPROVED: GA | PROJECT No. 36935792
DRAWN: KC

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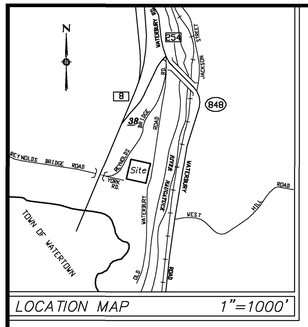
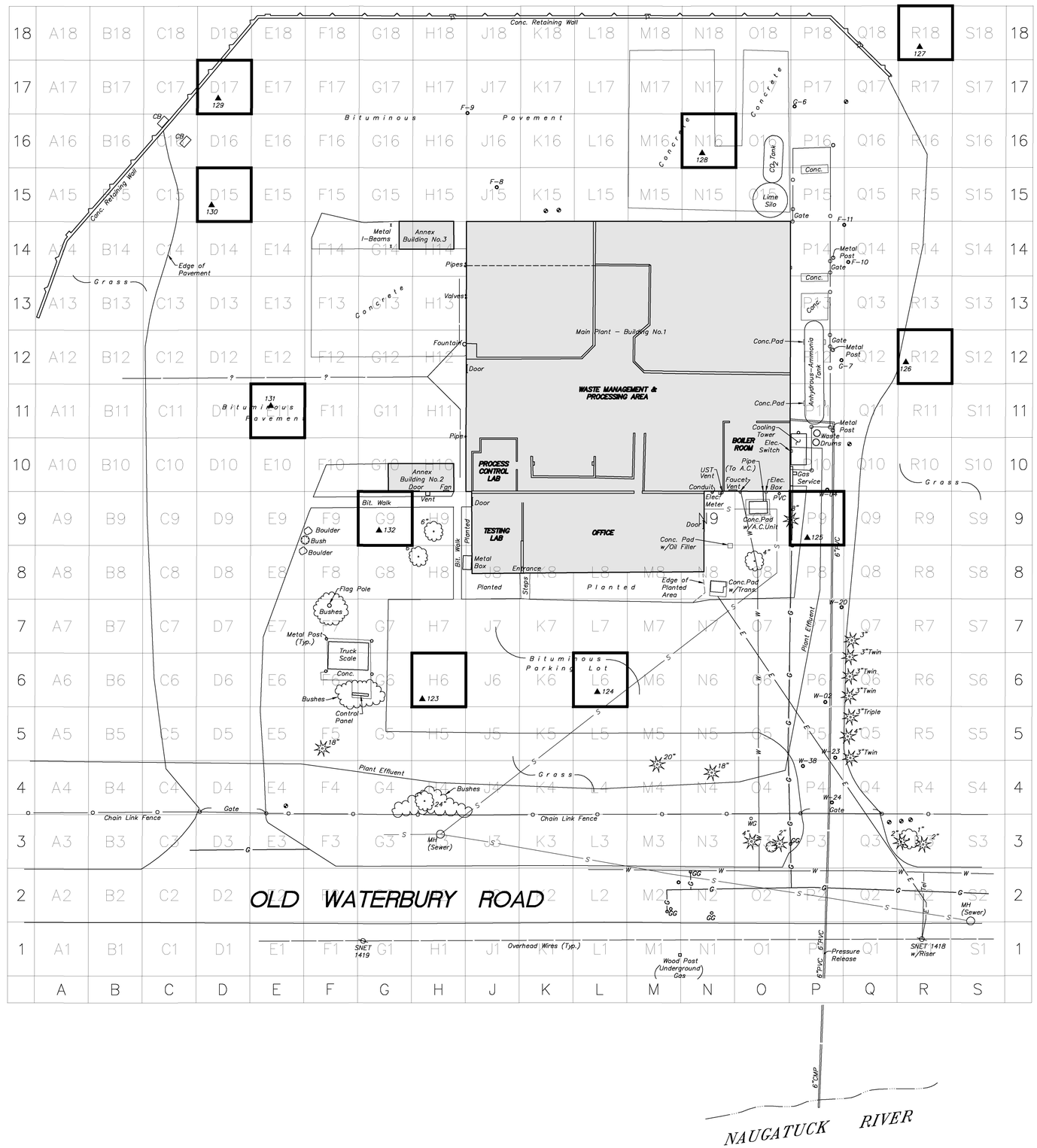


LOCATION MAP 1"=1000'

N



GRAPHIC SCALE 20 10 0 20 40 60

LEGEND

- Bush
- Catch Basin
- Coniferous Tree
- Deciduous Tree
- Gas Gate
- Hydrant
- Light Pole
- Mailbox
- Manhole
- Parking Meter
- Sign
- Utility Pole
- Water Gate
- Monitoring Well
- Boring

LEGEND

▲ DISCRETE SAMPLE LOCATION

NOTES:

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THRU 20-300b-20, AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THIS IS A COMPILATION PLAN PREPARED TO CLASS D STANDARDS. THIS PLAN WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
2. REFERENCE IS MADE TO PLAN ENTITLED "SITE PLAN ENVIRITE CORPORATION THOMASTON CONNECTICUT", BY FUSS & O'NEILL INC., SCALE 1"=40', DATED NOVEMBER 1988, REVISED TO 11-2-89.

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

SAMPLE LOCATIONS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: KC
DRAWN: KAH
SCALE: 1"= 20' DATE: 2/11/02
PROJECT No. 36935792
DRAWING No. 5-1

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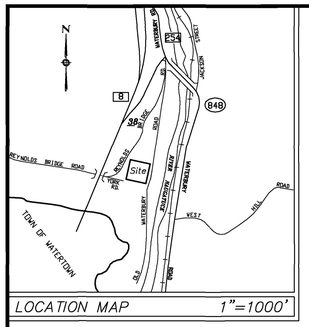

LOCATION MAP 1"=1000'

N

Bituminous Pavement

Concrete

CO_2 Tank

Lime Silo Tank

Conc.

Gate

F-11

Metal Post

F-10

Gate

Conc.

Conc.

Concrete Support

Gate

Metal Post

G-7

Anhydrous-Ammonia Tank

Concrete Support

Metal Post

Process Discharge Line

6"PVC

W-04

W-20

F-8

Unconfirmed Former 1,000 Gal. Gasoline Underground Storage Tank

Former 1,000 Gal. UST & Drainage System

Metal I-Beam

Metal I-Beam

Annex Building No.3

Overhead Door Overhead Door

Pipes

Tank Vent Pipe

WASTEWATER TREATMENT AREA

407 Tank WT-1 240 224

408 Tank WT-2 241 225

409 Tank WT-3 242 226

Sump Containment No.5

Trench Drain No.3

Sump Containment No.3

ACID UNLOADING AREA

FD

FD

Concrete Pad

FD

Valves

C1 VC1

239 Tank C-1 406 223

403 Tank VC-1 222

ACID STORAGE AREA

Former Tank ST-1

237 Tank WT-4 404 (SW-1) (T-12) 221

238 401 Tank B-1 402 220

Fountain

Concrete Berm

Metal Ramp

Concrete Berm

Door

Overhead Door

Main Plant - Building No.1

CENTRAL AISLE AREA

416 Tank D-1 245 233 228

413 Tank S-2 250 217 234 263

414 Tank S-1 249 235 218 264

415 Tank VC-2 265 244 236 219 251

Door

Filter Press

Trench Drain No.4

Column

Elec. Box

Metal Post

Sump Containment No.4

ALKALINE STORAGE & PROCESSING AREA

410 Tank E-2 248 260 214 230

411 Tank E-1 247 261 215 231

412 Tank ER-2 232 216 262

Overhead Catwalk

FILTER PRESS AREA

417 Tank T-15 122

Column

Tank NK-1 202 207 252

Tank CR-1 205 208 209

Tank ER-1 246 204 210

Tank SR-1 203 211

291 292 293

294 295

Alkaline Pipes

Concrete Berm

Chemical Pumps

405 Tank EH (T-13A) 227 229

Pipes

Tanks

Tank

Sump Containment No.6

Column

Sump Containment No.1

Former Trench Drain

Sump Containment No.2

Trench Drain No.2

Pipe

Chemical Pumps

MECHANICAL ROOM

Industrial Water Break Tank

Floor Drain

Gas Process Boiler

Elec. Switch

Tower Cooling

Acid Pipes

Alkaline Pipes

266 267 268 269

C-Line S-Line

CONTAINER MANAGEMENT AREA NO.2

270

CONTAINER MANAGEMENT AREA NO.1

Concrete Berm

HVAC Unit

Oil Furnace

Pipe (To A.C.)

Conc. Motor Elec. Box

Gas Service

CONTAINER UNLOADING/ DECANTING/WASHING AREA

296 297 298 299 Supply Storage

Lab. Chem.

PLANT CONTROL LABORATORY No.2

Lab. Chem.

Door

Lab. Chem.

Door

Elec. Panel

Column

Flammable Chemical Storage Cabinets

Column

Column

Conduit

Faucet Vent

UST Vent

Elec. Meter

PVC

Overhead Doors

Door

Annex Building No.2

Door

Fan

Vent

Bit. Walk

Former Maintainence Chemical Storage

Former Compressed Gas Storage

Former 1,000 Gal. UST & Drainage System

FD

FD

Door

Men's Bathroom & Locker Room ROOM 7

Lunch Room ROOM 5

ROOM 3

ROOM 1

Door

Sink

WASTE TESTING LABORATORY No.1

Planted

Laboratory Chemicals

Laboratory Chemicals

1,000 Gal. Underground Fuel Oil Storage Tank

A.C.Unit On Conc. Pad

18"

Conc. Pad w/Oil Fill Riser

4"

Fuel Oil Feed & Return Lines

Bit. Walk

Bin

Files

OFFICE AREA ROOM 6

ROOM 4

ROOM 2

Office Entrance

Transformer On Conc.Pad

Steps

Planted

Planted

Edge of Planted Area

SS

E

W

G

6"

6"

LEGEND

—W—	Water Line
—E—	Electrical Line
—SS—	Sanitary Sewer Line
—SW—	Storm Water Line
—G—	High Pressure Petroleum Gas
FD	Floor Drain
Tank NK-1	Vertical Process Tank
UST	Underground Storage Tank
▲	DISCRETE SAMPLE LOCATION
⅄	COMPOSITE SAMPLE LOCATION

10 5 0 10 20 30

GRAPHIC SCALE

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

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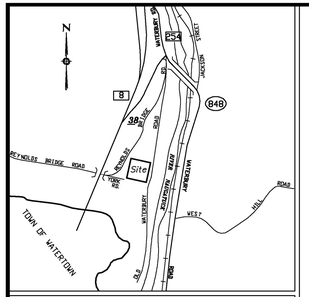
ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

PROCESS TANK SAMPLE LOCATIONS
TANK WIPES, WASTEWATER, & SLUDGE SAMPLES

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 11/23/02
PROJECT No. 36935792
DRAWING No. 5-2



LOCATION MAP 1"=1000'

N

Bituminous Pavement

Concrete

CO_2 Tank

Conc.

Lime Silo Tank

Gate

F-11

Metal Post

F-10

Gate

Conc.

Conc.

Concrete Support

Gate

Metal Post

G-7

Amhydrous-Ammonia Tank

F-8

302

Tank T-15

Unconfirmed Former 1,000 Gal. Gasoline Underground Storage Tank

Former 1,000 Gal. UST & Drainage System

Metal I-Beam

Annex Building No.3

Overhead Door Overhead Door

Metal I-Beam

Pipes

322

304

ACID UNLOADING AREA

FD

FD

Concrete Pad

Valves

321

C1

VC1

115

Concrete Berm

Fountain

WASTEWATER TREATMENT AREA

Tank WT-1

Tank WT-2

Tank WT-3

Tank Vent Pipe

Trench Drain No.3

118

102

Sump Containment No.3

Tank C-1

Tank VC-1

ACID STORAGE AREA

315

314

313

Former Tank ST-1

112

Tank WT-4 (SW-1) (T-12)

Tank B-1

Metal Ramp

Door

318

Concrete Berm

Main Plant - Building No.1

CENTRAL AISLE AREA

Overhead Door

320

114

319

Sump Containment No.6

Column

Sump Containment No.1

101

117

Sump Containment No.2

Trench Drain No.2

116

309

Pipe

323

347

346

345

305

341

121

340

301

109

110

306

C-Line

S-Line

CONTAINER UNLOADING/ DECANTING/WASHING AREA

344

CONTAINER MANAGEMENT AREA NO.2

307

342

308

CONTAINER MANAGEMENT AREA NO.1

Supply Storage

Lab. Chem.

Lab. Chem.

Door

PLANT CONTROL LABORATORY No.2

Lab. Chem.

Door

Elec. Panel

Column

Flammable Chemical Storage Cabinets

Column

339

338 Conduit

Overhead Doors

Door

Annex Building No.2

Door

Fan

Vent

Bit. Walk

Former Maintainence Chemical Storage

Former Compressed Gas Storage

Former 1,000 Gal. UST & Drainage System

FD

FD

Door

104

105

Sink

WASTE TESTING LABORATORY No.1

Laboratory Chemicals

Laboratory Chemicals

Men's Bathroom & Locker Room ROOM 7

Lunch Room ROOM 5

103

ROOM 3

ROOM 1

Door

Planted

Bit. Walk

Bin

106 Office Entrance

107

Files

OFFICE AREA ROOM 6

108

ROOM 4

ROOM 2

Planted

Steps

Planted

Edge of Planted Area

Transformer On Conc.Pad

Fuel Oil Feed & Return Lines

Sump Containment No.5

343

332

333

330

328

327

334

Door

Trench Drain No.4

331

329

336

Sump Containment No.4

337

119

335

120

Filter Press

FILTER PRESS AREA

113

Column

Elec. Box

Metal Post

312

ALKALINE STORAGE & PROCESSING AREA

Tank E-2

324

Tank E-1

Tank ER-2

326

Overhead Catwalk

325

Tank NK-1

Tank CR-1

Tank ER-1

Tank SR-1

Column

317

111

311

310

303

Concrete Berm

316

Tank EH (T-13A)

Chemical Pumps

Pipes

Tanks

Tank

Chemical Pumps

MECHANICAL ROOM

Industrial Water Break Tank

Floor Drain

Gas

Process Boiler

Elec. Switch

Tower

Cooling

HVAC Unit

Oil Furnace

Pipe (To A.C.)

Conc.

Motor

Elec. Box

Gas Service

Concrete Berm

Faucet

Vent

UST Vent

Elec. Meter

PVC

W-04

W-20

Process Discharge Line

6"PVC

SS

E

W

G

18"

A.C.Unit On Conc. Pad

4"

6000-Gal. Underground Fuel Oil Storage Tank

Conc. Pad w/Oil Fill Riser

LEGEND

—W—	Water Line
—E—	Electrical Line
—SS—	Sanitary Sewer Line
—SW—	Storm Water Line
—G—	High Pressure Petroleum Gas
FD	Floor Drain
Tank NK-1	Vertical Process Tank
UST	Underground Storage Tank
▲	DISCRETE SAMPLE LOCATION
▲	COMPOSITE SAMPLE LOCATION

10 5 0 10 20 30

GRAPHIC SCALE

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

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ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

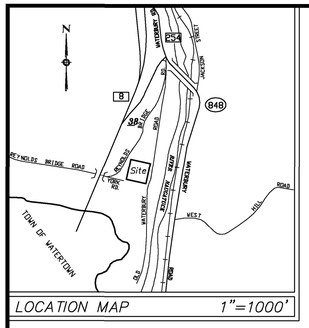
URS Corporation

500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CONCRETE SURFACE SAMPLE LOCATIONS
SWEEP, TRENCH WATER/SEDIMENT AND
CONCRETE CHIP SAMPLES

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

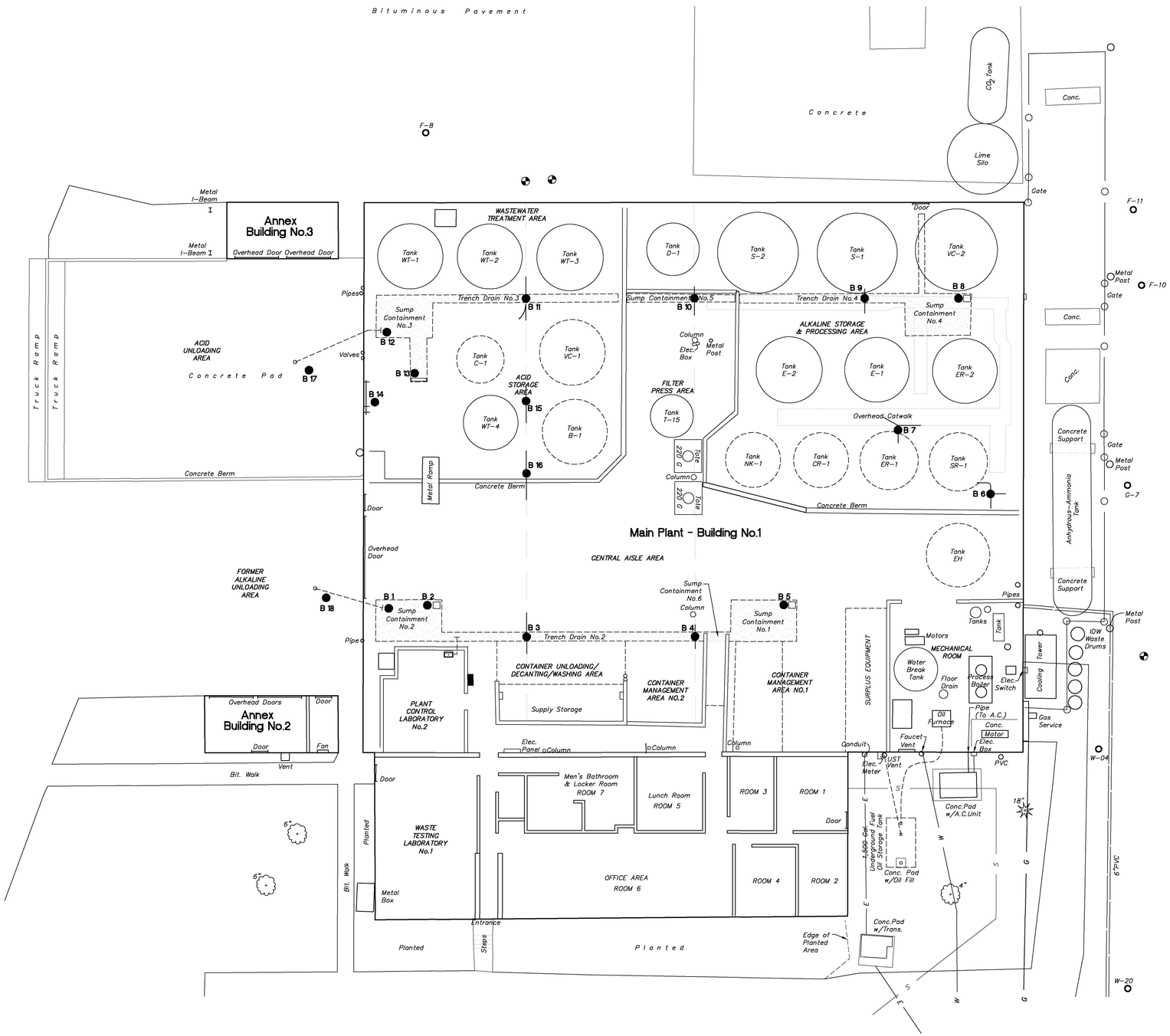
DESIGN:
APPROVED: GA
DRAWN: KC
SCALE: 1"= 10' DATE: 11/23/02
PROJECT No. 36935792
DRAWING No. 5-3



LOCATION MAP 1"=1000'

LEGEND

- B1 — Concrete Core Borehole
- Pad Drain/Pipe Outlet
- Sump
- Depicts Structural Floor Joint or Crack



GRAPHIC SCALE 10 5 0 10 20 30

COMPILATION PLAN
198 OLD WATERBURY ROAD
THOMASTON, CONNECTICUT
PREPARED FOR
ENVIRITE

ENVIRITE HAZARDOUS WASTE FACILITY
THOMASTON, CONNECTICUT

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, Connecticut 06067-4002
Tel. (860) 529-8882

CLOSURE PLAN – AMENDMENT NO. 6
CONCRETE SUB-SLAB SOIL SAMPLE LOCATIONS
FROM INTEGRITY ASSESSMENT INSPECTIONS

No.	Date
6	12-5-05
5	1-27-03
4	11-23-02
3	11-13-02
2	7-8-02
1	6-18-02

DESIGN:
APPROVED: GA
DRAWN: KAH
SCALE: 1"= 10' DATE: 12/5/05
PROJECT No. 36935792
DRAWING No. 6

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WASTE WATER TANK SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 2-3

Parameter	Units	Water Tank Tote PE201-CHWT1	Tank NK-1 PE202-NK1	Tank SR-1 PE203-SR1	Tank ER-1 PE204-ER1	Tank CR-1 PE205-CR1	Water Tank Tote PE206-CH	Trip Blank PE-TB
Metals	(mg/l)							
Arsenic		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
Barium		0.04	0.11	0.06	0.13	0.07	0.07	NA
Cadmium		<0.005	0.008	<0.005	<0.005	<0.005	<0.005	NA
Chromium, Total		<0.01	0.05	0.01	0.04	0.02	0.03	NA
Copper		0.01	0.15	0.05	0.17	0.08	0.13	NA
Iron		NA	NA	NA	NA	NA	2.9	NA
Lead		<0.050	0.061	<0.050	0.058	<0.050	<0.05	NA
Mercury		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA
Nickel		<0.025	0.066	<0.025	0.051	0.030	0.054	NA
Selenium		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
Silver		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
Zinc		<0.05	1.2	0.33	1.0	0.47	0.87	NA
Extr.Total Petroleum Hydrocarbons		NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds (VOCs)	(ug/l)							
Acetone		<5.0	<5.0	<5.0	<5.0	<5.0	21.0	<5.0
Chloroform		18	1	1.2	1.1	1.3	1.3	<0.75
Dibromochloromethane		3.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane		4.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene		1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl tert butyl ether		79.0	3.5	5.6	4.1	6.3	3.0	<1.0
Styrene		<0.50	2.7	<0.50	<0.50	<0.50	3.80	<0.50
Chemical Charateristics	(mg/l)							
Cyanide, Solid	(mg/kg)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
Sulfide-Total, Solid	(mg/kg)	NA	NA	NA	NA	NA	NA	NA
pH, Solid	SU	7.3	7.0	7.1	7.0	7.0	6.8	NA
Organic Carbon, Total	mg/l	1.5	9.5	5.7	6.8	6.4	17.0	NA
Specific Conductivity	(umhos/cm)	NA	NA	NA	NA	NA	NA	NA

WIPE SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 2-4

Parameter	Units	Tank NK-1 PE207-NK1	Tank CR-1 PE208-CR1	Tank CR-1 DUP PE209-CR1D	Tank ER-1 PE210-ER1	Tank SR-1 PE211-SR1	Pipes PE212-PIPES	Equipment Whip Blank PE213-
Metals	(ug Abs*)							
Arsenic		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Barium		40.00	66.00	62.00	34.00	38.00	42.00	49.00
Cadmium		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium, Total		1.6	2.0	2.2	1.6	0.77	1.7	0.5
Copper		18.0	4.9	6.1	6.7	1.3	6.4	0.68
Iron		NA	NA	NA	NA	NA	NA	NA
Lead		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Mercury		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel		<1.2	1.4	1.5	1.2	<1.2	1.6	<1.2
Selenium		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Zinc		54.0	66.0	65.0	42.0	41.0	62.0	43.0
Cyanide, Total		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

* Units expressed as "ug Abs" (micorgrams Absolute) for 1/4-inch surface using a 5-centimetrer diameter gauze wipe.

TANK RESIDUES SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-4

Parameter	Units	Tank E-2 PE214-E2	Tank E-1 PE215-E1	Tank ER-2 PE216-ER2	Tank S-2 PE217-S2	Tank S-1 PE218-S1	Tank VC-2 PE219-VC2	Tank D-1 PE228-D1	Tank E-2 PE230-E2	Tank E-1 PE231-E1	Tank ER-2 PE232-ER2	Tank D-1 PE233-D1	Tank S-2 PE234-S2	Tank S-1 PE235-S1	Tank VC-2 PE236-VC2
TCLP Metals	mg/L														
Arsenic		0.78	0.05	<0.01	0.51	0.01	NA	<0.10	NA	NA	NA	NA	NA	NA	NA
Barium		0.04	0.11	0.66	0.02	0.54	NA	0.3	NA	NA	NA	NA	NA	NA	NA
Cadmium		0.045	0.006	0.021	<0.005	<0.005	NA	<0.05	NA	NA	NA	NA	NA	NA	NA
Chromium, Trivalent (Cr+3)		1.67	0.25	0.02	0.02	0.38	NA	0.5	NA	NA	NA	NA	NA	NA	NA
Lead		0.159	<0.015	0.071	<0.015	<0.015	NA	<0.15	NA	NA	NA	NA	NA	NA	NA
Mercury		<0.001	<0.001	<0.001	<0.001	<0.001	NA	1	NA	NA	NA	NA	NA	NA	NA
Selenium		0.06	<0.05	0.05	<0.05	<0.05	NA	<0.001	NA	NA	NA	NA	NA	NA	NA
Silver		0.18	<0.01	<0.01	<0.01	<0.01	NA	<0.10	NA	NA	NA	NA	NA	NA	NA
Total Metals	mg/kg														
Antimony		NA	NA	NA	NA	NA	NA	NA	0.579	3.7	<2.0	<0.250	<20.0	<20.0	<2.0
Arsenic		NA	NA	NA	NA	NA	NA	NA	0.757	7.7	0.45	<0.050	110	19	1.8
Beryllium		NA	NA	NA	NA	NA	NA	NA	<0.025	2.4	<0.20	<0.025	8.7	3.2	0.22
Cadmium		NA	NA	NA	NA	NA	NA	NA	<0.025	5.9	0.48	<0.025	40	110	8.4
Chromium		NA	NA	NA	NA	NA	NA	NA	1.4	1500	3.5	0.35	3600	5300	350
Copper		NA	NA	NA	NA	NA	NA	NA	8.5	3900	9.5	0.43	5400	12000	2900
Lead		NA	NA	NA	NA	NA	NA	NA	0.362	110	18.0	0.124	750	540	130
Mercury		NA	NA	NA	NA	NA	NA	NA	<0.0005	6.8	<0.07	<0.0010	1.2	1.1	0.91
Nickel		NA	NA	NA	NA	NA	NA	NA	2.41	160	4.8	0.276	2500	3300	220
Selenium		NA	NA	NA	NA	NA	NA	NA	0.061	<0.79	<0.78	<0.050	<8.0	<8.0	<0.78
Silver		NA	NA	NA	NA	NA	NA	NA	0.121	8.7	<0.39	<0.035	37	14	18
Thallium		NA	NA	NA	NA	NA	NA	NA	<0.050	<0.40	<0.39	<0.050	<8.0	<8.0	<3.9
Zinc		NA	NA	NA	NA	NA	NA	NA	5.4	730	6.1	2.1	5300	8400	1500
Semi-Volatile Organic Compounds (SVOCs)	ug/kg														
Fluoranthene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl)phthalate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA
Benzoic Acid		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl Alchohol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg														
ETPH		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TANK RESIDUES SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-4

		Tank E-2	Tank E-1	Tank ER-2	Tank S-2	Tank S-1	Tank VC-2	Tank D-1	Tank E-2	Tank E-1	Tank ER-2	Tank D-1	Tank S-2	Tank S-1	Tank VC-2
Parameter	**Units**	**PE214-E2**	**PE215-E1**	**PE216-ER2**	**PE217-S2**	**PE218-S1**	**PE219-VC2**	**PE228-D1**	**PE230-E2**	**PE231-E1**	**PE232-ER2**	**PE233-D1**	**PE234-S2**	**PE235-S1**	**PE236-VC2**
Polychlorinated Biphenyls (PCBs)	mg/kg														
PCBs, Total		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Charateristics															
Chloride	mg/kg	140000	NA	680000	8600	3100	NA	150000	NA	NA	NA	NA	NA	NA	NA
Flash Point	Degree F	>200	NA	>200	>200	>200	NA	>200	NA	NA	NA	NA	NA	NA	NA
Ammonia as Nitrogen	mg/kg	44000	14000	250000	4200	1800	NA	0.49	NA	NA	NA	NA	NA	NA	NA
pH, Solid	SU	7.18	7.11	6.35	7.49	8.13	8.28	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Reactivity	mg/kg	<0.01	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide, Reactivity	mg/kg	<0.4	<20.0	<20.0	<20.0	<20.0	<20.0	<0.4	NA	NA	NA	NA	NA	NA	NA

WASTE WATER SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-5

Parameter	Units	CH CW	WW Tank VC-2	Tank T-1	Tank ER-1	Tank E-1	Tank E-2	Tank S-1	Tank S-2	Tank VC-2	NK 1 Tank Base	ALS TKS (Drums 1-3)	ALS TKS (Drums 4-6)	ALS TKS (Drum 7)
		PE243-CH CW	PE244-WWVC2	PE245-T1	PE246-ER1	PE247-E1	PE248-E2	PE249-S1	PE250-S2	PE251-VC2	PE252-NK1	PE253-ALS TKS	PE254-ALS TKS	PE255-ALS TKS
TCLP Metals	mg/l													
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	NA
Chromium, Trivalent (Cr+3)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Mercury		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA
Selenium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	NA
Total Metals	mg/kg													
Antimony		<0.050	0.083	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.6	12	7.6	12
Arsenic		<0.010	0.090	<0.010	<0.010	0.011	<0.010	<0.010	0.023	0.013	13	21	17	8.4
Beryllium		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.22	<3.0	<2.4	<3.9
Cadmium		<0.005	0.030	<0.005	0.011	<0.005	<0.005	<0.005	0.043	0.049	<0.45	39	25	93
Chromium		<0.01	0.92	0.01	0.17	0.19	0.03	0.39	4.2	3.1	130	3800	2600	5300
Copper		0.03	23	0.09	1.2	1.7	0.32	0.76	11	7.4	16	12000	8300	14000
Lead		<0.010	0.090	0.014	0.097	0.071	<0.010	0.045	0.533	0.372	15	820	490	660
Mercury		<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.0006	0.0017	0.0009	<0.08	2.2	0.90	2.2
Nickel		<0.025	1.76	0.104	0.319	0.257	0.071	0.208	2.95	1.98	77	3100	1900	3200
Selenium		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.90	<5.9	<4.8	<7.9
Silver		<0.007	0.022	<0.010	0.033	<0.007	<0.007	<0.007	0.046	0.021	<0.45	190	78	62
Thallium		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<4.5	<5.9	<4.8	<7.9
Zinc		0.06	9.9	0.17	1.5	0.52	0.64	0.53	7.4	3.9	79	6900	4100	7800
Semi-Volatile Organic Compounds (SVOCs)	ug/kg													
Fluoranthene		NA	<500	NA	NA	NA	NA	NA	NA	NA	NA	<7500	<3000	<1000
Bis (2-ethylhexyl)phthalate		NA	<1000	NA	NA	NA	NA	NA	NA	NA	NA	<15000	41000	2100
Butyl benzyl phthalate		NA	<500	NA	NA	NA	NA	NA	NA	NA	NA	<7500	<3000	<1000
Di-n-octylphthalate		NA	<500	NA	NA	NA	NA	NA	NA	NA	NA	<7500	6800	<1000
Dimethyl phthalate		NA	<500	NA	NA	NA	NA	NA	NA	NA	NA	<7500	18000	5000
Phenanthrene		NA	<500	NA	NA	NA	NA	NA	NA	NA	NA	<7500	<3000	<1000
Benzoic Acid		NA	6800	NA	NA	NA	NA	NA	NA	NA	NA	<75000	<30000	<10000
Benzyl Alchohol		NA	<1000	NA	NA	NA	NA	NA	NA	NA	NA	44000	22000	<2000
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg													
ETPH		NA	39000	NA	NA	NA	NA	NA	NA	NA	NA	2100	1100	570

WASTE WATER SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-5

Parameter	Units	CH CW	WW Tank VC-2	Tank T-1	Tank ER-1	Tank E-1	Tank E-2	Tank S-1	Tank S-2	Tank VC-2	NK 1 Tank Base	ALS TKS (Drums 1-3)	ALS TKS (Drums 4-6)	ALS TKS (Drum 7)
		PE243-CH CW	PE244-WWVC2	PE245-T1	PE246-ER1	PE247-E1	PE248-E2	PE249-S1	PE250-S2	PE251-VC2	PE252-NK1	PE253-ALS TKS	PE254-ALS TKS	PE255-ALS TKS
Polychlorinated Biphenyls (PCBs)	mg/kg													
PCBs, Total		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<373	<305	<500
Chemical Charateristics														
Chloride	mg/kg	31	37000	45	930	220	2100	170	120	150	NA	170000	260000	1500
Ammonia as Nitrogen	mg/kg	0.878	1840	1.13	231	88	268	5.46	5.52	50	NA	23000	47000	140
pH, Solid	SU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1	7.8	8.5
Cyanide, Reactivity	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA	NA
Cyanide, Total	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7	6.9	9.4
Sulfide, Reactivity	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.55	<1.0

* Applicable Media Closure Criteria - RSRs Industrial/Commercial Direct Exposure Criteria (I/C DEC).

WASTE WATER SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-5

Parameter	Units	ALS Pipes 1 (Bag 1) PE256-ALS Pipes 1	ALS Pipes 2 (Bag 2) PE257-ALS Pipes 2	Tote TK 15 PE258-TK15	ALS Pipes (CH Tote) PE259-ALS Pipes
TCLP Metals	mg/l				
Arsenic		NA	NA	NA	NA
Barium		NA	NA	NA	NA
Cadmium		NA	NA	NA	NA
Chromium, Trivalent (Cr+3)		NA	NA	NA	NA
Lead		NA	NA	NA	NA
Mercury		NA	NA	NA	NA
Selenium		NA	NA	NA	NA
Silver		NA	NA	NA	NA
Total Metals	mg/kg				
Antimony		13	14	6.2	<0.050
Arsenic		13	20	<4.0	<0.005
Beryllium		<5.3	<7.0	4.9	<0.005
Cadmium		<11	<14.0	8.9	0.012
Chromium		1700	1600	370	<0.01
Copper		1900	1900	1000	0.62
Lead		22000	34000	230	2.63
Mercury		0.90	2.5	0.19	<0.0005
Nickel		4300	9300	220	1.52
Selenium		<11	<14.0	<4.0	<0.005
Silver		70	80	8.9	<0.010
Thallium		<5.3	<7.0	<4.0	<0.005
Zinc		990	900	520	2.4
Semi-Volatile Organic Compounds (SVOCs)	ug/kg				
Fluoranthene		<27000	65000	<500	<24
Bis (2-ethylhexyl)phthalate		450000	720000	7800	<49
Butyl benzyl phthalate		100000	<36000	<500	<24
Di-n-octylphthalate		<27000	<36000	<500	<24
Dimethyl phthalate		<27000	<36000	12000	26
Phenanthrene		<27000	43000	<500	<24
Benzoic Acid		<270000	<360000	<5000	<240
Benzyl Alchohol		<54000	<71000	<1000	<49
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg				
ETPH		98000	90000	560	2400

WASTE WATER SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-5

Parameter	Units	ALS Pipes 1 (Bag 1) PE256-ALS Pipes 1	ALS Pipes 2 (Bag 2) PE257-ALS Pipes 2	Tote TK 15 PE258-TK15	ALS Pipes (CH Tote) PE259-ALS Pipes
Polychlorinated Biphenyls (PCBs)	mg/kg				
PCBs, Total		<3380	<4460	<252	<12.2
Chemical Charateristics					
Chloride	mg/kg	410	680	64	110
Ammonia as Nitrogen	mg/kg	240	660	12	22.4
pH, Solid	SU	7.6	7.7	9.1	7.1
Cyanide, Reactivity	mg/kg	NA	NA	NA	NA
Cyanide, Total	mg/kg	6.1	12	0.43	<0.005
Sulfide, Reactivity	mg/kg	<0.61	<0.80	1.7	<0.10

* Applicable Media Closure Criteria - RSRs Industrial/Commercial Direct Exposure Criteria (I/C DEC).

WIPE SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-6

Parameter	Units	Tank E-2 PE260-E2	Tank E-2 PE261-E2	Tank ER-2 PE262-ER2	Tank S-2 PE263-S2	Tank S-1 PE264-S1	Tank VC-2 PE265-VC2	ALS Pipe 1 PE266-ALS Pipes 1	ALS Pipe 2 PE267-ALS Pipes 2	ALS Pipe 3 PE268-ALS Pipes 3	ALS Pipe 4 PE269-ALS Pipes 4
Total Metals	(ug Abs)										
Cyanide		<0.25	<0.25	<0.25	0.27	<0.25	<0.25	<0.25	0.72	0.53	2.6
Arsenic		<0.50	<0.50	<0.50	0.92	0.54	<0.50	<0.50	<0.50	<0.50	<0.50
Barium		24	12	79	32	22	94	18	71	46	130
Cadmium		<0.50	<0.50	<0.50	1.8	0.82	<0.50	0.85	0.55	0.82	0.57
Chromium		1.8	1.4	1.1	150	97	3.1	33	81	140	80
Copper		6.1	3.2	2.8	560	400	8.1	100	570	410	400
Iron		22	22	30	830	650	43	670	1300	1000	1200
Lead		<2.5	<2.5	<2.5	27	21	<2.5	7.7	18	45	22
Mercury		<0.050	<0.050	<0.050	0.170	0.110	<0.050	0.070	0.980	0.630	0.650
Nickel		<1.2	<1.2	<1.2	130	72	2.3	48	55	150	49
Selenium		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver		<0.50	<0.50	<0.50	16	4.8	<0.50	<0.50	0.69	2.1	0.85
Zinc		28	14	67	380	150	82	150	230	610	210

ug Abs - micrograms Absolute

WIPE SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 4-6

Parameter	Units	ALS Pipe 5 PE270-ALS Pipes 5	ALS Pipe 6 PE291-ALS Pipes 6	ALS Pipe 7 PE292-ALS Pipes 7	ALS Pipe 8 PE293-ALS Pipes 8	ALS Pipe 9 PE294-ALS Pipes 9	ALS Pipe 10 PE295-ALS Pipes 10	ALS Pipe 11 PE296-ALS Pipes 11	ALS Pipe 12 PE297-ALS Pipes 12	ALS Pipe 13 PE2986-ALS Pipes 13	ALS Pipe 14 PE299-ALS Pipes 14
Total Metals	(ug Abs)										
Cyanide		2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		<0.50	<0.50	<0.50	<0.50	1.8	0.50	<0.50	2.7	<0.50	2.1
Barium		47	11	11	76	510	140	8.1	40	30	130
Cadmium		1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium		180	7.1	7.0	28	110	26	4.1	18	1.6	26
Copper		780	9.9	9.8	8.2	140	18	2.8	12	3.9	6.2
Iron		1300	1500	690	250	2400	1600	84	2000	170	1100
Lead		46	5.1	4.8	7.2	2700	600	4.0	5.8	<2.5	7.9
Mercury		0.940	<0.050	<0.050	<0.050	0.250	<0.050	<0.050	0.430	<0.050	0.080
Nickel		150	2.6	2.6	9.3	44	11	<1.2	5.1	<1.2	2.6
Selenium		<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Silver		1.2	<0.50	<0.50	<0.50	4.1	7.2	<0.50	<0.50	<0.50	<0.50
Zinc		250	65	44	34	140	51	28	52	38	58

ug Abs - micrograms Absolute

ACID TANK SAMPLE RESIDUES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5-4

Parameter	Units	Tank B-1 PE220-B1	TANK SW-1 PE221-SW1	TANK VC-1 PE222-VC1	TANK C-1 PE223-C1	Tank WT-1 PE224-WT1	Tank WT-2 PE225-WT2	Tank WT-3 PE226-WT3	Tank EH PE227-EH
TCLP Metals	(mg/l)								
Silver		0.13	0.24	<0.10	NA	<0.10	<0.10	<0.01	NA
Arsenic		<0.01	<0.01	<0.10	NA	<0.10	<0.10	<0.01	NA
Barium		0.64	0.36	2.50	NA	1.30	0.35	0.78	NA
Cadmium		0.266	<0.005	<0.05	NA	<0.05	<0.05	0.011	NA
Chromium		1.02	0.10	0.30	NA	<0.10	<0.10	0.11	NA
Lead		25.90	<0.015	0.29	NA	<0.15	0.250	0.248	NA
Selenium		<0.05	0.06	<0.50	NA	<0.50	<0.50	<0.05	NA
Mercury		<0.001	0.00	<0.001	NA	<0.001	<0.001	NA	NA
Chemical Charateristics									
Chloride	(mg/kg)	39,000	800	320,000	37,000	NA	NA	41,000	2,400
Corrosivity		N	N	P	N	N	N	N	N
Flash Point	Degree F	NA	NA	-	NA	NA	>200	NA	NA
Ignitability	Degree F	NA	NA	-	NA	NA	Passed	NA	NA
Ammonia as Nitrogen	(mg/kg)	NA	31	0.18	1,800	22	25	3,500	240
Reactivity Cyanide	(mg/kg)	NA	NA	<0.01	NA	NA	NA	NA	NA
Reactivity Sulfide	(mg/kg)	NA	NA	<0.4	NA	NA	NA	NA	NA
pH, Solid	SU	4.51	9.50	NA	6.08	NA	NA	6.70	7.82

- Due to the acidic nature of the sample, an ignitability test was performed in lieu of the standard flashpoint test. The sample did not catch fire.

P- Positive

N- Negative

WASTE WATER TANK SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5.5

Parameter	Units	Tank EH	Tank WT-4	Tank B-1	TANK C-1	Tank WT-1	Tank WT-2	Tank WT-3	CYN CW-1	Tank EH	Tank B-1	FP	Tank WT-4	Tank WT-3	Tank WT-2	CYN CW-2
		PE229-EH	PE237-WT4	PE238-B1	PE239-C1	PE240-TW1	PE241-TW2	PE242-TW3	PE271-CYN CW1	PE272-EH	PE273-B1	PE274-FP	PE275-WT4	PE276-WT3	PE277-WT2	PE278-CYN CW2
Total Metals	Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/l)	(mg/l)	(mg/kg)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/kg)	(mg/kg)
Aluminum		NA	NA	NA	NA	NA	NA	NA	0.15	1.2	15	0.20	10	1.3	0.74	0.91
Antimony		<22	<2.0	<2.0	<24.0	<0.050	<0.050	<2.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Arsenic		10	<0.40	1.5	18	<0.010	<0.010	1.9	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010
Barium		NA	NA	NA	NA	NA	NA	NA	0.03	0.04	1.9	6.6	0.04	0.46	0.05	0.02
Beryllium		<2.2	<0.20	1.6	<2.4	<0.005	<0.005	<0.20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium		9.5	4.1	3.7	<4.8	0.022	<0.005	<0.41	<0.005	0.007	0.006	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium		NA	NA	NA	NA	NA	NA	NA	16	25	28	16	18	12	11	12
Chromium		2700	95	140	1800	0.34	0.07	50	<0.01	0.10	0.40	<0.01	0.04	0.24	0.04	0.05
Cobalt		NA	NA	NA	NA	NA	NA	NA	<0.02	0.02	0.08	<0.02	<0.02	<0.02	<0.02	<0.02
Copper		57000	360	280	120	2.3	0.93	60	0.01	0.57	0.42	0.02	0.31	0.38	0.24	0.26
Iron		NA	NA	NA	NA	NA	NA	NA	0.24	3.3	7.7	1.2	1.4	4.2	1.6	2.0
Lead		210	56	120	600	0.214	0.682	79	<0.010	0.045	3.77	<0.010	0.017	0.272	0.457	0.025
Magnesium		NA	NA	NA	NA	NA	NA	NA	2.5	3.7	4.8	2.4	3.2	4.4	4.4	4.8
Manganese		NA	NA	NA	NA	NA	NA	NA	0.03	0.19	0.22	0.04	0.07	0.09	0.06	0.08
Mercury		4.0	0.09	0.29	0.50	<0.0010	<0.0005	3.5	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	0.0012	0.0011	<0.0005
Nickel		150000	46	70	1200	1.71	1.91	40	<0.025	0.694	1.25	<0.025	0.025	0.176	0.214	0.107
Potassium		NA	NA	NA	NA	NA	NA	NA	<2.5	4.2	4.6	<2.5	2.6	<2.5	<2.5	<2.5
Selenium		<8.6	<0.80	<2.0	<9.5	<0.10	<0.010	<0.81	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Silver		40	8.0	2.4	90	0.053	0.027	4.1	<0.007	<0.007	0.078	<0.007	<0.007	0.085	0.033	<0.007
Sodium		NA	NA	NA	NA	NA	NA	NA	21	68	41	21	30	19	11	11
Thallium		<4.3	<0.40	<3.9	<4.8	<0.010	<0.010	<0.41	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vanadium		NA	NA	NA	NA	NA	NA	NA	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01
Zinc		1900	3800	320	140	2.7	1.7	28	<0.05	0.40	0.36	<0.05	1.0	0.94	0.72	1.1
Volatile Organic Compounds (VOCs)	(ug/l)															
Chloroform		NA	NA	NA	NA	NA	NA	NA	<0.75	NA	NA	NA	NA	NA	NA	<15
Dibromochloromethane		NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	<10
Bromodichloromethane		NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	<10
Methyl tert butyl ether (MTBE)		NA	NA	NA	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	<20
Acetone		NA	NA	NA	NA	NA	NA	NA	5.1	NA	NA	NA	NA	NA	NA	<100
2-Butanone		NA	NA	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA	NA	<100
Tetrahydrofuran		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	940
Chemical Characteristics																
Cyanide, Total	(mg/L)	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

* Applicable Media Closure Criteria - RSRs Industrial/Commercial Direct Exposure Criteria (I/C DEC).

\- Due to the acidic nature of the sample, an ignitability test was performed in lieu of the standard flashpoint test. The sample did not catch fire.

P- Positive

N- Negative

WASTE WATER TANK SAMPLE RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5.5

		Tank WT-1	Tank C-1	CYN CW-3	Tank VC-1	TANK WT-2	TANK WT-2	TANK C-1	TANK C-1
Parameter	**Units**	**PE279-WT1**	**PE280-C1**	**PE281-CW3**	**PE282-VC1**	**EN430-WT2A**	**EN431-WT2B**	**EN436-C1A**	**EN437-C1B**
Total Metals	**Units**	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminum		0.87	2.2	0.14	6.1	NA	NA	NA	NA
Antimony		<0.050	<0.050	<0.050	<0.050	NA	NA	NA	NA
Arsenic		<0.010	<0.010	<0.010	<0.010	0.014	0.007	0.050	0.005
Barium		0.48	1.7	0.01	0.04	0.08	0.02	0.23	0.02
Beryllium		<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
Cadmium		<0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.012	<0.005
Calcium		11	12	11	12	NA	NA	NA	NA
Chromium		0.47	0.59	<0.01	0.05	0.26	0.04	0.84	0.03
Cobalt		<0.02	<0.02	<0.02	<0.02	NA	NA	NA	NA
Copper		0.25	0.61	0.01	0.08	0.39	0.08	5.1	0.18
Iron		2.9	8.6	0.09	1.8	NA	NA	NA	NA
Lead		0.109	0.500	<0.010	0.012	2.61	0.441	3.72	0.200
Magnesium		4.6	5.6	2.8	3.2	NA	NA	NA	NA
Manganese		0.08	0.16	<0.01	0.03	NA	NA	NA	NA
Mercury		0.0028	<0.0005	<0.0005	<0.0005	<0.0010	<0.0002	<0.0010	<0.0002
Nickel		0.584	0.544	<0.025	<0.025	0.108	<0.025	0.313	<0.025
Potassium		<2.5	<2.5	20	22	NA	NA	NA	NA
Selenium		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Silver		0.142	0.008	<0.007	<0.007	<0.007	<0.007	0.014	<0.007
Sodium		19	18	14	31	NA	NA	NA	NA
Thallium		<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
Vanadium		<0.01	0.01	<0.01	<0.01	NA	NA	NA	NA
Zinc		0.61	1.4	<0.05	0.11	2.4	0.48	7.9	0.52
Volatile Organic Compounds (VOCs)	(ug/l)								
Chloroform		NA	NA	4.9	NA	NA	NA	NA	NA
Dibromochloromethane		NA	NA	2.4	NA	NA	NA	NA	NA
Bromodichloromethane		NA	NA	3.0	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)		NA	NA	<1.0	NA	NA	NA	NA	NA
Acetone		NA	NA	<5.0	NA	NA	NA	NA	NA
2-Butanone		NA	NA	<5.0	NA	NA	NA	NA	NA
Tetrahydrofuran		NA	NA	<10	NA	NA	NA	NA	NA
Chemical Characteristics									
Cyanide, Total	(mg/L)	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA

* Applicable Media Closure Criteria - RSRs Industrial/
Direct Exposure Criteria (I/C DEC).

\- Due to the acidic nature of the sample, an ignitability
performed in lieu of the standard flashpoint test. The
catch fire.

P- Positive

N- Negative

WIPE SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5-6

Parameter	Units	Tank WT-3 PE283-WT3	Tank WT-2 PE284-WT2	Tank WT-1 PE285-WT1	Tank VC-1 PE286-VC1	Tank C-1 PE287-C1	Tank B-1 PE288-B1	Tank WT-4 PE289-WT4	Tank EH PE290-EH	Tank B-1 PE401-B1	Tank B-1 PE402-B1	Tank VC-1 PE403-VC1	Tank WT-4 PE404-WT4	Tank EH PE405-EH	Tank C-1 PE406-C1	Tank WT-1 PE407-WT1	Tank WT-2 PE408-WT2	Tank WT-3 PE409-WT3
Total Metals	(ug Abs)																	
Cyanide		0.96	1.7	1.4	<0.25	3.9	13	0.82	0.74	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		1.7	0.53	0.83	<0.50	<0.50	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50
Barium		220	65	54	14	67	130	110	44	9.5	25	7.2	4.5	3.0	130	20	90	20
Cadmium		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.77	<0.50	<0.50	<0.50	<0.50
Chromium		31	18	99	6.8	74	19	1.5	0.77	19	19	92	7.5	3.3	81	21	20	7.4
Copper		6.8	25	18	3.0	4.3	3.2	2.4	1.6	14	24	7.1	10	3.7	4.8	8.6	30	4.5
Iron		160	9000	8200	99	93	73	37	27	1400	2000	180	120	54	65	1500	550	84
Lead		24	35	25	<2.5	13	17	<2.5	<2.5	26	83	7.7	2.8	<2.5	29	11	67	6.7
Mercury		<0.050	<0.050	0.110	<0.050	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<0.050	<0.050	<0.050	0.057	<0.050	<0.050
Nickel		6.7	23	45	<1.2	20	32	<1.2	<1.2	7.4	13	3.6	3.0	<1.2	28	24	56	2.4
Selenium		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver		4.1	5.0	4.2	<0.50	1.2	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	1.1	1.0
Zinc		36	85	170	23	21	92	99	42	28	28	21	62	15	24	47	46	16

ug Abs - micrograms Absolute

WIPE SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5-6

Parameter	Units	Tank E-2 PE410-E2	Tank E-1 PE411-E1	Tank ER-2 PE412-ER2	Tank S-2 PE413-S2	Tank S-1 PE414-S1	Tank VC-2 PE415-VC2	Tank D-1 PE416-D1	Tank T-15 PE417-T15	TANK WT-1 EN426-WT3A1	TANK WT-1 EN427-WT3A2	TANK WT-1 EN428-WT3B1	TANK WT-1 EN429-WT3B2	TANK WT-2 EN432-WT2A1	TANK WT-2 EN433-WT2A2	TANK WT-2 EN434-WT2B1	TANK WT-2 EN435-WT2B2	TANK C-1 EN438-C1A1
Total Metals	(ug Abs)																	
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		<0.50	2.5	<0.50	3.3	1.6	<0.50	1.2	2.4	2.1	6.3	6.9	5.1	2.1	2.2	2.6	4.6	4.3
Barium		26	19	9.9	19	20	11	25	14	12	15	14	11	9.0	9.7	8.3	11	14
Cadmium		1.1	11	<0.50	5.7	3.8	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium		8.1	780	8.8	480	240	14	27	27	8.0	61	2.8	3.3	10	25	6.8	1.6	12
Copper		14	1600	17	1300	740	28	90	21	24	140	6.5	10	42	12	3.9	6.0	64
Iron		180	3600	160	2100	2100	180	17000	37000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		5.4	82	4.8	73	79	3.9	8.6	4.0	110	62	6.3	6.2	210	300	97	50	210
Mercury		<0.050	0.32	<0.050	0.180	0.130	<0.050	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel		4.6	660	3.5	290	160	10	56	15	8.4	54	2.5	4.9	11	6.2	1.8	<1.2	8.8
Selenium		<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Silver		<0.50	2.0	<0.50	5	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Zinc		3.7	890	43	840	430	45	320	73	53	290	72	16	49	38	15	18	450

ug Abs - micrograms Absolute

WIPE SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 5-6

Parameter	Units	TANK C-1 EN439-C1A2	TANK C-1 EN440-C1B1	TANK C1 EN441-C1B2	TNAK WT-1 EN418-WT1A	TNAK WT-1 EN419-WT1B	TNAK WT-1 EN420-WT1A1	TNAK WT-1 EN421-WT1A2	TNAK WT-1 EN422-WT1B1	TNAK WT-1 EN423-WT1B2	TANK WT-1 EN424-WT3A	TANK WT-1 EN425-WT3B
Total Metals	(ug Abs)											
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		3.1	7.1	10	0.028	<0.005	3.6	3.6	2.2	2.4	0.026	<0.005
Barium		14	16	16	0.13	0.02	14	14	7.5	9.6	0.17	0.02
Cadmium		0.99	<0.50	<0.50	0.008	<0.005	<0.50	0.52	<0.50	<0.50	0.006	<0.005
Chromium		30	1.3	1.8	0.38	0.01	7.5	8.8	1.4	3.0	0.51	0.03
Copper		98	15	11	1.4	0.08	92	29	5.0	9.1	0.85	0.06
Iron		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		81	7.3	41	1.03	0.067	18	28	9.6	3.9	3.90	0.199
Mercury		<0.05	<0.05	<0.05	<0.0010	<0.0002	<0.05	<0.05	<0.05	<0.05	0.0003	<0.0002
Nickel		34	1.6	1.7	0.187	<0.025	8.2	12	<1.2	3.1	0.149	<0.025
Selenium		<2.5	<2.5	<2.5	<0.020	<0.010	<2.5	<2.5	<2.5	<2.5	<0.010	<0.010
Silver		<0.50	<0.50	<0.50	<0.007	<0.007	<0.50	<0.50	<0.50	<0.50	0.010	<0.007
Zinc		360	98	120	3.4	0.25	96	330	54	58	3.0	0.33

ug Abs - micrograms Absolute

RESIDUE AND WASTE WATER SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-4

Parameter	Units	EAST TRENCH PE101-ETRENCH	WEST TRENCH PE102-WTRENCH	SC1 PE116	SC2 PE117	SC3 PE118W	SC4 PE119	SC5 PE120	SC6 PE121	TANK T-15 PE122	ACID SUMP 3 EN133	ACID SUMP 4 EN134	OLD DRAIN SUMP 3 EN135	SUMP #2 CONTAINER AREA EN136
Total Metals	(mg/l)													
Arsenic		<0.005	<0.005	0.009	0.034	0.025	0.299	0.014	0.023	<0.005	0.015	<0.005	<0.005	NA
Barium		0.01	0.09	0.14	1.7	0.46	0.99	0.26	1.9	<0.01	0.02	0.045	0.03	0.067
Cadmium		<0.005	0.025	0.102	0.192	0.026	0.117	0.049	0.074	<0.005	0.0055	<0.005	<0.005	<0.005
Chromium		<0.01	0.01	0.23	3.7	0.83	4.7	0.70	2.2	<0.01	<0.02	<0.02	<0.02	<0.02
Copper		0.08	0.44	0.84	18	6.6	8.5	2.4	4.1	0.01	0.044	0.063	0.024	0.36
Iron		0.75	0.91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		<0.050	1.02	0.351	3.07	4.63	2.82	0.526	0.868	<0.050	<0.005	0.59	<0.005	0.0053
Mercury		<0.0005	<0.0005	0.0017	0.0384	0.0056	0.0067	0.0031	0.0081	<0.0005	<0.0004	<0.0004	<0.0004	NA
Nickel		<0.025	0.106	0.065	2.56	0.205	2.25	0.377	0.709	<0.025	<0.02	<0.02	<0.02	0.035
Selenium		<0.005	<0.005	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.005	<0.005	<0.005	NA
Silver		<0.010	<0.010	0.014	0.068	0.157	0.222	0.011	0.017	<0.007	<0.01	<0.01	<0.01	NA
Zinc		0.64	3.6	2.2	14	4.6	18	11	28	<0.05	0.87	1.0	0.66	0.89
Chemical Charateristics														
TOC	(mg/l)	3	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH, Solid	SU	5.7	4.3	8.3	8.0	6.2	8.9	6.9	7.9	7.0	NA	NA	NA	6.72
Volatile Organic Compounds (VOCs)		ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

- Due to the acidic nature of the sample, an ignitability test was performed in lieu of the standard flashpoint test. The sample did not catch fire.

P- Positive

N- Negative

RESIDUE AND WASTE WATER SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-4

Parameter	Units	SUMP #5 FILTER PRESS AREA
		EN137
Total Metals	(mg/l)	
Arsenic		NA
Barium		0.065
Cadmium		<0.005
Chromium		0.036
Copper		0.026
Iron		NA
Lead		<0.005
Mercury		NA
Nickel		<0.02
Selenium		NA
Silver		NA
Zinc		0.33
Chemical Charateristics		
TOC	(mg/l)	NA
pH, Solid	SU	7.02
Volatile Organic Compounds (VOCs)		NA

- Due to the acidic nature of the sample, an ignitability performed in lieu of the standard flashpoint test. The catch fire.

P- Positive

N- Negative

CONCRETE FLOOR AND CONTAINMENT SYSTEM CONCRETE CHIP SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-5

		CM-1	CM-2 (5/30/02)	ALS	ACS (5/30/02)	ACS (7/19/02)	FP	CS	ACL	SC3 - 7/19/02	SC3	GRID H6	GRID L6	GRID P9	GRID R12	GRID R18
Parameter	**Units**	**PE109-CM1**	**PE110-CM2**	**PE111-ALS**	**PE112-ACS**	**PE112-ACS**	**PE113-FP**	**PE114-CS**	**PE115-ACL**	**PE118S**	**PE118**	**PE123-H6**	**PE124-L6**	**PE125-P9**	**PE126-R12**	**PE127-R18**
Total Metals	mg/kg															
Antimony		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		9.1	11	11	9.0	NA	7.2	7.2	<4.0	17	NA	2.8	2.7	2.7	2.6	1.9
Barium		54	120	83	95	NA	61	95	83	380	NA	48	67	41	78	40
Cadmium		31	14	12	32	NA	8.2	16	12	14	NA	1.1	6.8	0.59	2.6	2.0
Chromium		210	570	580	850	NA	350	390	1220	850	NA	68	200	32	64	71
Copper		420	670	520	2200	NA	440	550	2900	2600	NA	140	610	58	170	170
Lead		96	260	140	980	NA	270	200	100	2000	NA	54	210	31	62	49
Mercury		0.45	1.7	0.32	0.57	NA	0.73	1.2	0.14	1.8	NA	<0.13	0.13	<0.09	<0.09	<0.08
Nickel		90	190	220	110	NA	95	120	69	250	NA	35	120	16	35	51
Selenium		<4.1	<4.1	<4.2	<8.4	NA	<4.1	<4.1	<4.0	<20	NA	<1.2	<1.0	<0.90	<0.92	<0.85
Silver		<4.1	4.2	<4.2	4.5	NA	6.9	<4.1	<4.0	34	NA	1.3	3.9	<0.45	0.54	0.84
Thallium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		3600	3100	3300	3200	NA	1600	4000	1800	3300	NA	150	360	100	180	210
TCLP METALS	mg/L		7/19/02													
Arsenic		NA	<1.0	NA	NA	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	NA	NA	NA
Barium		NA	<0.50	NA	NA	1.0	NA	NA	NA	NA	1.3	NA	<0.50	NA	NA	NA
Cadmium		NA	<0.10	NA	NA	0.42	NA	NA	NA	NA	<0.10	NA	<0.10	NA	NA	NA
Chromium		NA	0.64	NA	NA	3.2	NA	NA	NA	NA	<0.20	NA	<0.20	NA	NA	NA
Lead		NA	<0.50	NA	NA	0.50	NA	NA	NA	NA	1.1	NA	<0.50	NA	NA	NA
Mercury		NA	<0.005	NA	NA	<0.005	NA	NA	NA	NA	<0.005	NA	<0.005	NA	NA	NA
Selenium		NA	<0.50	NA	NA	<0.50	NA	NA	NA	NA	<0.50	NA	<0.50	NA	NA	NA
Silver		NA	<0.10	NA	NA	<0.10	NA	NA	NA	NA	<0.10	NA	<0.10	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs)	mg/kg															
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polyclorinated Biphenyls (PCBs)	mg/kg															
PCBs (Total)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg															
ETPH		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Characteristics																
pH	SU	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6	NA	NA	NA	NA	NA

CONCRETE FLOOR AND CONTAINMENT SYSTEM CONCRETE CHIP SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-5

Parameter	Units	GRID N16 (6/13/02) PE128-N16	GRID N16 (7/19/02) PE128-N16	GRID D17 PE129-D17	GRID D15 PE130-D15	GRID E11 PE131-E11	GRID G9 PE132-G9	CM-1 PE301-CM1	NWCP SILO TANK PE302-NWCP	ALS TANK NK-1 BERM PE303-NK1 BERM	ACL PE304-ACL	TR2 PE305-TR2	CM2 PE306-CM2	CM2 PE307-CM2	CM1 PE308-CM1	CM1 PE309-CM1
Total Metals	mg/kg															
Antimony		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		4.4	NA	2.3	1.9	1.8	3.2	3.0	NA	NA	3.4	NA	2.2	NA	NA	NA
Barium		140	NA	45	63	44	75	60	NA	NA	77	NA	100	NA	NA	NA
Cadmium		19	NA	2.1	0.93	1.6	6.3	5.4	<1.9	<1.9	5.2	<1.9	<2.0	<1.9	<2.0	<1.9
Chromium		320	NA	85	79	76	290	43	27	24	82	18	320	19	33	19
Copper		1000	NA	220	150	140	550	270	42	33	260	140	53	23	160	73
Lead		310	NA	110	110	110	130	810	13	<9.5	980	<9.5	130	<9.7	<9.9	<9.6
Mercury		<0.14	NA	<0.09	<0.10	<0.14	<0.09	<0.20	NA	NA	<0.08	NA	0.60	NA	NA	NA
Nickel		330	NA	55	38	42	150	21	26	19	35	16	35	14	16	13
Selenium		<1.3	NA	<0.96	<1.0	<1.5	<0.97	<3.9	NA	NA	<3.8	NA	<3.9	NA	NA	NA
Silver		5.6	NA	2.5	2.3	1.0	3.8	3.4	NA	NA	3.7	NA	<2.0	NA	NA	NA
Thallium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		1600	NA	260	150	250	510	13000	200	200	730	38	590	31	46	60
TCLP METALS	mg/L															
Arsenic		NA	<1.0	NA	NA	NA	NA	<1.0	NA	NA	<1.0	NA	<1.0	NA	NA	NA
Barium		NA	0.78	NA	NA	NA	NA	<0.50	NA	NA	<0.50	NA	<0.50	NA	NA	NA
Cadmium		NA	<0.10	NA	NA	NA	NA	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA
Chromium		NA	<0.20	NA	NA	NA	NA	<0.20	NA	NA	<0.20	NA	<0.20	NA	NA	NA
Lead		NA	<0.50	NA	NA	NA	NA	<0.50	NA	NA	<0.50	NA	<0.50	NA	NA	NA
Mercury		NA	<0.005	NA	NA	NA	NA	<0.005	NA	NA	<0.005	NA	<0.005	NA	NA	NA
Selenium		NA	<0.50	NA	NA	NA	NA	<0.50	NA	NA	<0.50	NA	<0.50	NA	NA	NA
Silver		NA	<0.10	NA	NA	NA	NA	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs)	mg/kg															
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polyclorinated Biphenyls (PCBs)	mg/kg															
PCBs (Total)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg															
ETPH		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Characteristics																
pH	SU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

CONCRETE FLOOR AND CONTAINMENT SYSTEM CONCRETE CHIP SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-5

Parameter	Units	ALS TANK SR PE310-ALS SR	ALS TANK NK/CR PE311-ALS NK/CR	FP PE312-FP	ACS TANK VC/B1 PE313-VC/B1	ACS TANK C1/WT4 PE-314-ACS C1/WT4	ASC TANK SC3 PE315-ACS SC3	CS TANK EH PE316-CS EH	CS FP PE317-CS FP	CS NEAR ACS PE318-CS ACS	CS NEAR TR 2 PE319-CS TR2	CS O/H DOOR PE320-CS O/HDR	ACL VALVES PE321-ACL VALVES	ACL PIPES PE322-SCL PIPES
Total Metals	mg/kg													
Antimony		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		NA	NA	4.0	2.4	2.8	3.2	NA	2.5	3.0	NA	NA	5.4	3.7
Barium		NA	NA	45	51	56	46	NA	35	160	NA	NA	71	66
Cadmium		<1.9	<2.0	<1.9	<2.0	<1.9	<2.0	<1.8	<2.0	4.0	<1.9	<1.9	<2.0	<1.9
Chromium		25	32	25	23	35	45	16	16	280	17	16	17	21
Copper		38	24	24	25	22	28	34	22	680	39	16	13	24
Lead		<9.5	<9.8	2400	3100	9200	4900	<8.8	800	150	<9.6	<9.4	1800	1800
Mercury		NA	NA	<0.19	<0.07	<0.08	<0.07	NA	<0.07	0.48	NA	NA	<0.08	<0.07
Nickel		18	19	13	13	16	18	11	11	180	13	11	14	15
Selenium		NA	NA	<3.8	<3.9	<3.8	<3.9	NA	<3.9	<3.9	NA	NA	<4.0	<3.8
Silver		NA	NA	<1.9	<2.0	<1.9	<2.0	NA	<2.0	2.2	NA	NA	<2.0	<1.9
Thallium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		180	37	34	32	28	37	45	36	660	36	23	33	43
TCLP METALS	mg/L													
Arsenic		NA	NA	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	NA	<1.0	<1.0
Barium		NA	NA	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	NA	NA	<0.50	<0.50
Cadmium		NA	NA	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	<0.10
Chromium		NA	NA	<0.20	<0.20	<0.20	<0.20	NA	<0.20	<0.20	NA	NA	<0.20	<0.20
Lead		NA	NA	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	NA	NA	<0.50	<0.50
Mercury		NA	NA	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	<0.005	<0.005
Selenium		NA	NA	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	NA	NA	<0.50	<0.50
Silver		NA	NA	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	<0.10
Semi-Volatile Organic Compounds (SVOCs)	mg/kg													
Phenol		NA	NA	21	110	35	75	NA	NA	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	130	840	250	200	NA	NA	NA	NA	NA	NA	NA
Polyclorinated Biphenyls (PCBs)	mg/kg													
PCBs (Total)		NA	NA	<0.25	<0.25	<0.25	<0.25	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg													
ETPH		NA	NA	150	810	440	510	NA	NA	NA	NA	NA	NA	NA
Chemical Characteristics														
pH	SU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

CONCRETE FLOOR AND CONTAINMENT SYSTEM CONCRETE CHIP SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-5

Parameter	Units	ALL ENTRY	TANKS E2 E1	O/H CATWALK	TANK ER-2 SUMP	TANK VC-2 SUMP	TANK S-1	ERO (N)	TANK S2 (N)	ERO (S)	TANK D-1	TANK S-2 (S)	TANK VC-2	TANK ER-2 SUMP	SUMP 4
		PE323-ALL ENTRY	PE324-E2 E1	PE325-OHCAT	PE326-ER2	PE327-VC2SUMP	PE328-S1	PE329-ERO (N)	PE330-S2 (N)	PE331-ERO (S)	PE332-D1	PE333-S2 (S)	PE334-VC2	PE335-ER2SUMP	PE336-SUMP 4
Total Metals	mg/kg														
Antimony		NA	<5.1	<5.3	<5.1	<5.1	<5.2	<5.3	<5.2	<5.5	<5.2	<5.0	<5.5	<5.3	<5.3
Arsenic		NA	3.1	2.6	3.0	3.2	3.2	2.9	2.9	3.2	3.1	3.1	4.2	3.4	3.4
Barium		NA	<0.51	<0.53	<0.51	<0.51	<0.52	<0.53	<0.52	<0.55	0.59	<0.50	<0.55	<0.53	<0.53
Cadmium		<1.9	<1.0	<1.1	<1.0	<1.0	<1.0	<1.1	<1.0	<1.1	1.2	<1.0	6.4	<1.1	<1.0
Chromium		14	33	24	32	23	29	70	22	45	490	28	290	54	32
Copper		27	28	44	72	34	65	170	36	89	390	46	850	52	120
Lead		<9.4	6.8	<5.3	10	5.1	6.1	16	<5.2	12	48	6.7	73	6.6	8.8
Mercury		NA	<0.07	<0.07	<0.08	<0.07	<0.08	<0.08	<0.07	<0.09	<0.08	<0.08	<0.08	<0.08	0.09
Nickel		10	16	12	20	9.6	16	32	11	21	30	13	230	28	18
Selenium		NA	<2.0	<2.1	<2.0	<2.0	<2.1	<2.1	<2.1	<2.2	<2.1	<2.0	<2.2	<2.1	<2.1
Silver		NA	<1.0	<1.1	<1.0	<1.0	1.1	<1.1	<1.0	<1.1	1.8	<1.0	2.3	<1.1	<1.0
Thallium		NA	<5.1	<5.3	<5.1	<5.1	<5.2	<5.3	<5.2	<5.5	5.2	<5.0	<5.5	<5.3	<5.3
Zinc		30	38	40	74	31	78	100	31	46	120	48	5700	74	51
TCLP METALS	mg/L														
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs)	mg/kg														
Phenol		NA	NA	NA	NA	NA	NA	<38	NA	<79	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA	NA	520	NA	1000	NA	NA	NA	NA	NA
Polyclorinated Biphenyls (PCBs)	mg/kg														
PCBs (Total)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg														
ETPH		NA	NA	NA	NA	NA	NA	480	NA	1100	NA	NA	NA	NA	NA
Chemical Characteristics															
pH	SU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

CONCRETE FLOOR AND CONTAINMENT SYSTEM CONCRETE CHIP SAMPLES RESULTS
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 6-5

Parameter	Units	TANK E-1 PE337-E1	CM-1 (N) PE338-CM1 (N)	CM-1 (E) PE339-CM1 (E)	CM-1 (W) PE340-CM1 (W)	CM-2 (N) PE341-CM2 (N)	CM-2 EYEWASH STATION PE342-CM2EYE	TANK D-1 (S) PE343-D1 (S)	CU/D/W (N) PE344-CU/D/W (N)	CU/D/W (GRATE) PE345-CU/D/W (G)	CU/D/W (S) PE346-CU/D/W (S)	PCL DRAIN PE347-PCL DRAIN
Total Metals	mg/kg											
Antimony		<5.2	<5.2	<5.1	<5.2	<5.2	<5.1	<5.1	<2.0	<2.0	<2.0	<2.0
Arsenic		4.3	2.6	2.6	2.5	3.0	2.4	3.2	2.3	2.5	2.3	2.7
Barium		<0.52	<0.52	<0.51	<0.52	<0.52	<0.51	<0.51	0.26	0.24	0.20	0.34
Cadmium		<1.0	<1.0	<1.0	1.8	<1.0	<1.0	1.2	<0.40	<0.40	<0.40	0.67
Chromium		76	20	22	54	30	18	200	17	18	17	26
Copper		92	47	33	220	50	35	280	30	53	24	120
Lead		7.8	6.9	9.4	15	5.7	<5.1	60	2	2.2	<2.0	4.1
Mercury		0.14	<0.07	<0.08	<0.08	0.26	0.27	<0.08	<0.08	<0.07	<0.07	<0.08
Nickel		44	11	11	19	10	9.7	92	9.9	10	8.8	12
Selenium		<2.1	<2.1	<2.0	<2.1	<2.1	<2.0	<2.0	<0.80	<0.79	<0.80	<0.79
Silver		<1.0	<1.0	<1.0	2.8	<1.0	<1.0	2.6	<0.40	<0.40	<0.40	0.95
Thallium		<5.2	<5.2	<5.1	<5.2	<5.2	<5.1	<5.1	<2.0	<2.0	<2.0	<2.0
Zinc		64	41	50	35	43	53	380	27	26	24	32
TCLP METALS	mg/L											
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs)	mg/kg											
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polyclorinated Biphenyls (PCBs)	mg/kg											
PCBs (Total)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons (ETPH)	mg/kg											
ETPH		NA	NA	NA	NA	NA	NA	NA	960	7400	2700	1300
Chemical Characteristics												
pH	SU	NA	NA	NA	NA	NA	NA	NA	<0.24	0.53	<0.25	0.99

CONCRETE SUB-SLAB SOIL SAMPLE RESULTS
INTEGRITY ASSESSMENT
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 7-8

Parameter	Units	Remedial Standard Regulations (RSRs)* RDEC (mg/kg)	Remedial Standard Regulations (RSRs)* I/C DEC (mg/kg)	Alkaline Unloading Pad - Sump Containment No. 2 Pipe Outlet B1-S1 (0-12)	Alkaline Unloading Pad - Sump Containment No. 2 B2-S1 (0-6)	Container Unloading / Decanting / Washing Area - Trench Drain No. 2 Joint Crack B3-S1 (0-12)	Container Management Area No. 2 - Trench Drain No. 2 Joint Crack B4-S1 (0-12)	Container Management Area No. 1 - Sump Containment No. 1 B5-S1 (0-3)	Alkaline Storage & Processing Area - Floor Cracks B6-S1 (0-12)	Alkaline Storage & Processing Area - Floor Joint Cracks B7-S1 (0-12)	Alkaline Storage & Processing Area - Sump Containment No. 4 B8-S1 (0-12)	Alkaline Storage & Processing Area - Trench Dain No. 4 Joint Crack B9-S1 (0-8)
Metals	(mg/kg)											
Arsenic		10	10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium		4,700	140,000	33.00	40.00	41.00	50.00	41.00	47.00	48.00	43.00	51.00
Cadmium		34	1,000	0.61	0.86	1.30	0.94	140.00	0.87	1.90	0.61	0.32
Chromium, Trivalent (Cr+3)		3,900	51,000	6.70	9.60	12.00	22.00	13.00	47.00	13.00	250.00	79.00
Copper		2,500	76,000	15.00	29.00	8.20	47.00	33.00	120.00	31.00	64.00	35.00
Lead		400	1,000	5.10	13.00	21.00	8.50	14.00	43.00	17.00	290.00	200.00
Mercury		20	610	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel		1,400	7,500	6.30	9.20	8..2	6.20	10.00	8.50	9.20	1.90	2.20
Selenium		340	10,000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver		340	10,000	2.60	6.30	1.90	0.22	6.40	1.10	4.10	1.40	0.38
Zinc		20,000	610,000	25.00	50.00	49.00	39.00	48.00	31.00	63.00	10.00	12.00
Extr.Total Petroleum Hydrocarbons		500	2,500	37.00	<20.0	26.00	76.00	48.00	<20.0	43.00	36.00	20.00
Chemical Charateristics	(mg/kg)											
Cyanide, Solid				<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Sulfide-Total, Solid				<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
pH, Solid	RCRA	$\leq$2.0	$\geq$12.5	10.10	11.00	9.61	10.60	9.66	7.33	7.39	4.34	7.82
Specific Conductivity (umhos/cm)				130.00	290.00	74.00	40.00	150.00	23.00	35.00	57.00	48.00

* Applicable Media Closure Criteria - RSRs Industrial/Commercial Direct Exposure Criteria (I/C DEC).

CONCRETE SUB-SLAB SOIL SAMPLE RESULTS
INTEGRITY ASSESSMENT
ENVIRITE HAZARDOUS WASTE CLOSURE
THOMASTON, CT

TABLE 7-8

Parameter	Units	Remedial Standard Regulations (RSRs)* RDEC (mg/kg)	Remedial Standard Regulations (RSRs)* I/C DEC (mg/kg)	Filter Press Area - Sump Containment No. 5 Joint Crack B10-S1 (0-2)	Acid Storage Area - Trench Drain No. 3 Joint Crack B11-S1 (0-2)	Acid Unloading Area - Sump Containment No. 3 Pipe Outlet B12-S1 (0-2)	Acid Storage Area - Sump Containment No. 3 B13-S1 (0-4)	Acid Storage Area - Floor Crack and Pipe Outlet B14-S1 (0-12)	Acid Storage Area - Floor Joint Crack B15-S1 (0-11)	Acid Storage Area - Floor Joint Crack B16-S1 (0-12)	Acid Unloading Area - Pad Drain Inlet B17-S2 (12-24)	Alkaline Unloading Area - Pad Drain Inlet B18-S2 (6-8)
Metals	(mg/kg)											
Arsenic		10	10	2.80	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium		4,700	140,000	380.00	96.00	73.00	37.00	53.00	44.00	40.00	71.00	36.00
Cadmium		34	1,000	1.40	0.17	0.26	1.10	0.94	1.00	0.93	1.10	0.75
Chromium, Trivalent (Cr+3)		3,900	51,000	320.00	70.00	37.00	190.00	41.00	11.00	58.00	170.00	12.00
Copper		2,500	76,000	430.00	25.00	27.00	230.00	140.00	20.00	210.00	170.00	86.00
Lead		400	1,000	860.00	110.00	350.00	90.00	43.00	24.00	34.00	230.00	9.70
Mercury		20	610	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Nickel		1,400	7,500	270.00	3.30	7.60	8.20	9.70	12.00	20.00	1.30	14.00
Selenium		340	10,000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver		340	10,000	15.00	4.10	3.10	5.80	<0.20	<0.20	0.99	1.90	<0.20
Zinc		20,000	610,000	320.00	14.00	3.90	41.00	57.00	46.00	57.00	9.80	78.00
Extr.Total Petroleum Hydrocarbons		500	2,500	820.00	28.00	20.00	<20.0	38.00	<20.0	90.00	<20.0	<20.0
Chemical Charateristics	(mg/kg)											
Cyanide, Solid				<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Sulfide-Total, Solid				80.00	24.00	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
pH, Solid	RCRA	≤2.0	≥12.5	8.09	9.68	7.62	10.60	4.87	7.04	7.83	5.02	7.13
Specific Conductivity (umhos/cm)				34.00	330.00	110.00	320.00	8.10	83.00	49.00	50.00	11.00

* Applicable Media Closure Criteria - RSRs Industrial/Commercial Direct Exposure Criteria (I/C DEC).

APPENDIX A

Facility Closure Plan, RCRA Part B Operating Permit, Attachment C, July 1994, Rev. 2B.

RCRA Closure Plan Guidance - Container Storage Areas And Tank Systems, Prepared by Connecticut Department of Environmental Protection, Waste Engineering and Enforcement, Waste Management Bureau, Draft November 1993.

RCRA Hazardous Waste Closure Plan – Approval of Implementation of Closure Process, Connecticut Department of Environmental Protection, Waste Engineering and Enforcement, March 20, 2002.

APPENDIX B

Facility Layout

As Referenced in the Envirite Hazardous Waste Permit

Site Plan, Figure 5-2, November 1993, Rev. 2.
Plant Layout, Figure 5-3, November 1993, Rev. 2.
Liquids Storage Locations, Figure 3-1, July 1994, Rev. 2B, 07/95.
Liquids Storage and Container Layout Figure 3-2, July 1994, Rev. 2B, 07/95.
Solids Storage Locations, Figure 3-3, July 1994, Rev. 2B, 07/95.
Solids Storage and Container Layout, Figure 3-4, July 1994, Rev. 2B, 07/95.
Recovery and Reconstitution Tanks, Figure 3-6, July 1994, Rev. 2B, 07/95.
Waste Activity Areas, Figure 3-10, July 1994, Rev. 2B, 07/95.
Tank Layout, Figure 3-11, July 1994, Rev. 2B, 07/95.
Pure-Etch Process Flow Diagram, Rev. 0, 11/21/94.

APPENDIX C

Facility Inventory, Process Tank System Connection Schematics

APPENDIX D

Facility Closure Shipment Tracking Records

APPENDIX E

Concrete Core and Sub-Slab Soil Boring Logs

Facility Integrity Assessment of Floor and Trench Systems within the Regulated Units

December 2005

APPENDIX F

Master Laboratory Sample Tracking Index

URS Corporation AES

January 2002 to August 2006

	100 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS						H2S				RCRA	RCRA	RCRA	RCRA	HM
						VOC				Metals *		CN	TOC				Corr	React	TCLP	ACM
1	01/07/02	PE-101	East Trench	RO	A-L0200168-01	x				x		x	x				x			
2	01/07/02	PE-102	West Trench	RO	A-L0200168-02	x				x		x	x				x			
3	01/07/02	PE-103	L Bath-C.T.	ACM	U-14773-001															x
4	01/07/02	PE-104	A Lab-C.T.	ACM	U-14773-002															x
5	01/07/02	PE-105	A Lab-C.T.	ACM	U-14773-003															x
6	01/07/02	PE-106	Foyer-C.T.	ACM	U-14773-004															x
7	01/07/02	PE-107	Fr Ofc-S-C.T	ACM	U-14773-005															x
8	01/07/02	PE-108	Fr Ofc-N-C.T.	ACM	U-14773-006															x
9	05/30/02	PE-109	CM1	FS	A-L0205316-02					x										
10	05/30/02	PE-110	CM2	FS	A-L0205316-01					x										
11	07/19/02	PE-110	CM2	FS	A-L0206786-01													x	x	
12	05/30/02	PE-111	ALS	FS	A-L0205316-03					x										
13	05/30/02	PE-112	ACS	FS	A-L0205316-05					x										
14	07/19/02	PE-112	ACS	FS	A-L0206786-02													x	x	
15	05/30/02	PE-113	FP	FS	A-L0205316-04					x										
16	05/30/02	PE-114	CS	FS	A-L0205316-06					x										
17	05/31/02	PE-115	ACL	FS	A-L0205316-07					x										
18	06/04/02	PE-116	SC1	BS	A-L0205411-03					x							x			
19	06/04/02	PE-117	SC2	BS	A-L0205411-05					x							x			
20	06/04/02	PE-118W	SC3	RO	A-L0205411-01					x							x			
21	06/04/02	PE-118S	SC3	BS	A-L0205411-08					x							x			
22	07/19/02	PE-118	SC3	BS	A-L0206786-03													x	x	
23	06/04/02	PE-119	SC4	BS	A-L0205411-07					x							x			
24	06/04/02	PE-120	SC5	BS	A-L0205411-06					x							x			
25	06/04/02	PE-121	SC6	BS	A-L0205411-04					x							x			
26	06/04/02	PE-122	Tank T-15	TW	A-L0205411-02					x							x			

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS						H2S				RCRA	RCRA	RCRA	RCRA	HM
						VOC				Metals *		CN	TOC				Corr	React	TCLP	ACM
27	06/13/02	**PE-123**	Grid H6	SS	A-L0205834-01					x										
28	06/13/02	**PE-124**	Grid L6	SS	A-L0205834-02					x										
29	07/19/02	**PE-124**	Grid L6	SS	A-L0206786-04													x	x	
30	06/13/02	**PE-125**	Grid P9	SS	A-L0205834-03					x										
31	06/13/02	**PE-126**	Grid R12	SS	A-L0205834-04					x										
32	06/13/02	**PE-127**	Grid R18	SS	A-L0205834-05					x										
33	06/13/02	**PE-128**	Grid N16	SS	A-L0205834-06					x										
34	07/19/02	**PE-128**	Grid N16	SS	A-L0206786-05													x	x	
35	06/13/02	**PE-129**	Grid D17	SS	A-L0205834-07					x										
36	06/13/02	**PE-130**	Grid D15	SS	A-L0205834-08					x										
37	06/13/02	**PE-131**	Grid E11	SS	A-L0205834-09					x										
38	06/13/02	**PE-132**	Grid G9	SS	A-L0205834-10					x										
39	09/14/04	**EN-133**	Acid Sump 3	RO	E-04090238-01					x										
40	09/14/04	**EN-134**	Alk Sump 4	RO	E-04090238-02					x										
41	09/14/04	**EN-135**	Old Drain Sump 3	RO	E-04090238-03					x										
42	08/02/06	**EN-136**	Sump #2 Container Area	RO	E-06080023-01					x										
43	08/02/06	**EN-137**	Sump #5 Filter Press Area	RO	E-06080023-02					x										

APPENDIX G

Summary Tables of Analytical Laboratory Results

Table 1-5
Laboratory Sample
Tracking Log

	100 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS VOC				Metals *		H2S CN	TOC			RCRA	RCRA Corr	RCRA React	RCRA TCLP	HM ACM
1	01/07/02	PE-101	East Trench	RO	A-L0200168-01	x				x		x	x				x			
2	01/07/02	PE-102	West Trench	RO	A-L0200168-02	x				x		x	x				x			
3	01/07/02	PE-103	L Bath-C.T.	ACM	U-14773-001															x
4	01/07/02	PE-104	A Lab-C.T.	ACM	U-14773-002															x
5	01/07/02	PE-105	A Lab-C.T.	ACM	U-14773-003															x
6	01/07/02	PE-106	Foyer-C.T.	ACM	U-14773-004															x
7	01/07/02	PE-107	Fr Ofc-S-C.T	ACM	U-14773-005															x
8	01/07/02	PE-108	Fr Ofc-N-C.T.	ACM	U-14773-006															x
9	05/30/02	PE-109	CM1	FS	A-L0205316-02					x										
10	05/30/02	PE-110	CM2	FS	A-L0205316-01					x										
11	07/19/02	PE-110	CM2	FS	A-L0206786-01													x	x	
12	05/30/02	PE-111	ALS	FS	A-L0205316-03					x										
13	05/30/02	PE-112	ACS	FS	A-L0205316-05					x										
14	07/19/02	PE-112	ACS	FS	A-L0206786-02													x	x	
15	05/30/02	PE-113	FP	FS	A-L0205316-04					x										
16	05/30/02	PE-114	CS	FS	A-L0205316-06					x										
17	05/31/02	PE-115	ACL	FS	A-L0205316-07					x										
18	06/04/02	PE-116	SC1	BS	A-L0205411-03					x							x			
19	06/04/02	PE-117	SC2	BS	A-L0205411-05					x							x			
20	06/04/02	PE-118W	SC3	RO	A-L0205411-01					x							x			
21	06/04/02	PE-118S	SC3	BS	A-L0205411-08					x							x			
22	07/19/02	PE-118	SC3	BS	A-L0206786-03													x	x	
23	06/04/02	PE-119	SC4	BS	A-L0205411-07					x							x			
24	06/04/02	PE-120	SC5	BS	A-L0205411-06					x							x			
25	06/04/02	PE-121	SC6	BS	A-L0205411-04					x							x			
26	06/04/02	PE-122	Tank T-15	TW	A-L0205411-02					x							x			

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS										RCRA	RCRA	RCRA	RCRA	HM
						VOC				Metals *		H2S CN	TOC				Corr	React	TCLP	ACM
27	06/13/02	PE-123	Grid H6	SS	A-L0205834-01					x										
28	06/13/02	PE-124	Grid L6	SS	A-L0205834-02					x										
29	07/19/02	PE-124	Grid L6	SS	A-L0206786-04													x	x	
30	06/13/02	PE-125	Grid P9	SS	A-L0205834-03					x										
31	06/13/02	PE-126	Grid R12	SS	A-L0205834-04					x										
32	06/13/02	PE-127	Grid R18	SS	A-L0205834-05					x										
33	06/13/02	PE-128	Grid N16	SS	A-L0205834-06					x										
34	07/19/02	PE-128	Grid N16	SS	A-L0206786-05													x	x	
35	06/13/02	PE-129	Grid D17	SS	A-L0205834-07					x										
36	06/13/02	PE-130	Grid D15	SS	A-L0205834-08					x										
37	06/13/02	PE-131	Grid E11	SS	A-L0205834-09					x										
38	06/13/02	PE-132	Grid G9	SS	A-L0205834-10					x										
39	09/14/04	EN-133	Acid Sump 3	RO	E-04090238-01					x										
40	09/14/04	EN-134	Alk Sump 4	RO	E-04090238-02					x										
41	09/14/04	EN-135	Old Drain Sump 3	RO	E-04090238-03					x										
42	08/02/06	EN-136	Sump #2 Container Area	RO	E-06080023-01					x										
43	08/02/06	EN-137	Sump #5 Filter Press Area	RO	E-06080023-02					x										

Table 1-5
Laboratory Sample
Tracking Log

	200 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS VOC		ETPH	PCBs	Metals	SVOCs	H2S CN	TOC	NH3	Cl	RCRA Ignit	RCRA Corr	RCRA React	RCRA TCLP	
1	07/22/02	PE-201	C.H.Wtr Tank	CW	A-L0207260-01	x				x		x	x				x			
2	07/22/02	PE-202	Tank NK-1	RW	A-L0207260-02	x				x		x	x				x			
3	07/22/02	PE-203	Tank SR-1	RW	A-L0207260-03	x				x		x	x				x			
4	07/22/02	PE-204	Tank ER-1	RW	A-L0207260-04	x				x		x	x				x			
5	07/22/02	PE-205	Tank CR-1	RW	A-L0207260-05	x				x		x	x				x			
6	07/22/02	PE-206	C.H.Wtr Tote	WW	A-L0207260-06	x				x		x	x				x			
7	07/22/02	PE-TB	Trip Blank-072302	TB	A-L0207260-07	x														
8	07/22/02	PE-207	Tank NK-1	W	A-L0207260-08					x		x								
9	07/22/02	PE-208	Tank CR-1	W	A-L0207260-09					x		x								
10	07/22/02	PE-209	Tank CR-1(dup)	W	A-L0207260-10					x		x								
11	07/22/02	PE-210	Tank ER-1	W	A-L0207260-11					x		x								
12	07/22/02	PE-211	Tank SR-1	W	A-L0207260-12					x		x								
13	07/22/02	PE-212	PIPES	W	A-L0207260-13					x		x								
14	07/22/02	PE-213	Wipe Equip.Blk	W	A-L0207260-14					x		x								
15	08/28/02	PE-214	Tank E-2	TW	P-AE32795									x	x	x	x	x	x	
16	08/28/02	PE-215	Tank E-1	TS	P-AE32796									x			x	x	x	
17	08/28/02	PE-216	Tank ER-2	TS	P-AE32797									x	x	x	x	x	x	
18	08/28/02	PE-217	Tank S-2	TS	P-AE32798									x	x	x	x	x	x	
19	08/28/02	PE-218	Tank S-1	TS	P-AE32799									x	x	x	x	x	x	
20	08/28/02	PE-219	Tank VC-2	TS	P-AE32800												x	x		

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS						H2S				RCRA	RCRA	RCRA	RCRA	
						VOC		ETPH	PCBs	Metals	SVOCs	CN	TOC	NH3	Cl	Ignit	Corr	React	TCLP	
21	08/28/02	PE-220	Tank B-1	TS	P-AE33148										x		x		x	
22	08/28/02	PE-221	Tank SW-1	TS	P-AE33149									x	x		x		x	
23	08/28/02	PE-222	Tank VC-1	TW	P-AE33150									x	x	x	x	x	x	
24	08/28/02	PE-223	Tank C-1	TS	P-AE33151									x	x		x			
25	08/28/02	PE-224	Tank WT-1	TW	P-AE33152									x			x		x	
26	08/28/02	PE-225	Tank WT-2	TW	P-AE33153									x		x	x		x	
27	08/28/02	PE-226	Tank WT-3	TS	P-AE33154									x	x		x		x	
28	08/28/02	PE-227	Tank EH	TS	P-AE33155									x	x		x			
29	08/28/02	PE-228	Tank D-1	TW	P-AE33156									x	x	x	x	x	x	
30	08/28/02	PE-229	Tank EH	TS	L0212430-01					x										
31	08/28/02	PE-230	Tank E-2	TW	L0212430-02					x										
32	08/28/02	PE-231	Tank E-1	TS	L0212430-03					x										
33	08/28/02	PE-232	Tank ER-2	TS	L0212430-04					x										
34	08/28/02	PE-233	Tank D-1	TW	L0212430-05					x										
35	08/28/02	PE-234	Tank S-2	TS	L0212430-06					x										
36	08/28/02	PE-235	Tank S-1	TS	L0212430-07					x										
37	08/28/02	PE-236	Tank VC-2	TS	L0212430-08					x										
38	08/28/02	PE-237	Tank WT-4	TS	L0212430-09					x										
39	08/28/02	PE-238	Tank B-1	TS	L0212430-10					x										
40	08/28/02	PE-239	Tank C-1	TS	L0212430-11					x										
41	08/28/02	PE-240	Tank WT-1	TW	L0212430-12					x										
42	08/28/02	PE-241	Tank WT-2	TW	L0212430-13					x										
43	08/28/02	PE-242	Tank WT-3	W	L0212430-14					x										

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS										RCRA	RCRA	RCRA	RCRA	
						VOC		ETPH	PCBs	Metals	SVOCs	H2S CN	TOC	NH3	Cl	Ignit	Corr	React	TCLP	
44	11/27/02	PE-243	CH CW	CW	L0212430-15					x				x	x					
45	11/27/02	PE-244	WW Tank VC-2	WW	L0212430-16					x				x	x					
46	11/27/02	PE-245	Tank T-1	RW	L0212430-17					x				x	x					
47	11/27/02	PE-246	Tank ER-1	RW	L0212430-18					x				x	x					
48	11/27/02	PE-247	Tank E-1	RW	L0212430-19					x				x	x					
49	11/27/02	PE-248	Tank E-2	RW	L0212430-20					x				x	x					
50	11/27/02	PE-249	Tank S-1	RW	L0212430-21					x				x	x					
51	11/27/02	PE-250	Tank S-2	RW	L0212430-22					x				x	x					
52	11/27/02	PE-251	Tank VC-2	RW	L0212430-23					x				x	x					
53	01/14/03	PE-252	NK1 Tank Base	CC	L0300502-01					x										
54	01/14/03	PE-253	ALS TKS (DRUMS 1-3)	TS	L0300502-02			x	x	x	x	x		x	x	x	x	x	x	
55	01/14/03	PE-254	ALS TKS (DRUMS 4-6)	TS	L0300502-03			x	x	x	x	x		x	x		x			
56	01/15/03	PE-255	ALS TKS (DRUM 7)	TS	L0300502-04			x	x	x	x	x		x	x		x			
57	01/14/03	PE-256	ALS PIPES 1 (BAG 1)	PS	L0300502-05			x	x	x	x	x		x	x		x			
58	01/14/03	PE-257	ALS PIPES 2 (BAG 2)	PS	L0300502-06			x	x	x	x	x		x	x		x			
59	01/14/03	PE-258	TOTE TK15	TS	L0300502-07			x	x	x	x	x		x	x		x			
60	01/14/03	PE-259	ALS PIPES (CH TOTE)	WW	L0300502-08			x	x	x	x	x		x	x		x			
61	01/15/03	PE-260	Tank E2	W	L0300502-09					x		x								
62	01/16/03	PE-261	Tank E2	W	L0300502-10					x		x								
63	01/17/03	PE-262	Tank ER2	W	L0300502-11					x		x								
64	01/18/03	PE-263	Tank S2	W	L0300502-12					x		x								
65	01/19/03	PE-264	Tank S1	W	L0300502-13					x		x								
66	01/20/03	PE-265	Tank VC2	W	L0300502-14					x		x								
67	01/21/03	PE-266	ALS PIPE 1	W	L0300502-15					x		x								
68	01/22/03	PE-267	ALS PIPE 2	W	L0300502-16					x		x								
69	01/23/03	PE-268	ALS PIPE 3	W	L0300502-17					x		x								
70	01/24/03	PE-269	ALS PIPE 4	W	L0300502-18					x		x								
71	01/25/03	PE-270	ALS PIPE 5	W	L0300502-19					x		x								

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS						H2S				RCRA	RCRA	RCRA	RCRA	
						VOC		ETPH	PCBs	Metals	SVOCs	CN	TOC	NH3	Cl	Ignit	Corr	React	TCLP	
72	02/04/03	PE-271	CYN CW1	CW	A-L0301634-05	x				x		x								
73	02/04/03	PE-272	Tank EH	RW	A-L0301634-06					x		x								
74	02/04/03	PE-273	Tank B1	RW	A-L0301634-07					x		x								
75	02/04/03	PE-274	FP	RW	A-L0301634-08					x		x								
76	02/05/03	PE-275	Tank WT4	RW	A-L0301634-09					x		x								
77	02/06/03	PE-276	Tank WT3	RW	A-L0301634-10					x		x								
78	02/06/03	PE-277	Tank WT2	RW	A-L0301634-11					x		x								
79	02/06/03	PE-278	CYN CW2	CW	A-L0301634-12	x				x		x								
80	02/07/03	PE-279	Tank WT1	RW	A-L0301634-13					x		x								
81	02/07/03	PE-280	Tank C1	RW	A-L0301634-14					x		x								
82	02/19/03	PE-281	CYN CW3	CW	A-L0301634-15	x				x		x								
83	02/19/03	PE-282	Tank VC1	RW	A-L0301634-16					x		x								
84	02/20/03	PE-283	Tank WT3	W	A-L0301634-17					x		x								
85	02/20/03	PE-284	Tank WT2	W	A-L0301634-18					x		x								
86	02/20/03	PE-285	Tank WT1	W	A-L0301634-19					x		x								
87	02/20/03	PE-286	Tank VC1	W	A-L0301634-20					x		x								
88	02/20/03	PE-287	Tank C1	W	A-L0301634-21					x		x								
89	02/20/03	PE-288	Tank B1	W	A-L0301634-22					x		x								
90	02/20/03	PE-289	Tank WT4	W	A-L0301634-23					x		x								
91	02/20/03	PE-290	Tank EH	W	A-L0301634-24					x		x								

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS						H2S				RCRA	RCRA	RCRA	RCRA	
						VOC		ETPH	PCBs	Metals	SVOCs	CN	TOC	NH3	Cl	Ignit	Corr	React	TCLP	
92	05/07/03	PE-291	ALS PIPE 6	W	A-L0304327-01					x										
93	05/07/03	PE-292	ALS PIPE 7	W	A-L0304327-02					x										
94	05/07/03	PE-293	ALS PIPE 8	W	A-L0304327-03					x										
95	05/07/03	PE-294	ALS PIPE 9	W	A-L0304327-04					x										
96	05/07/03	PE-295	ALS PIPE 10	W	A-L0304327-05					x										
97	05/07/03	PE-296	ALS PIPE 11	W	A-L0304327-06					x										
98	05/07/03	PE-297	ALS PIPE 12	W	A-L0304327-07					x										
99	05/07/03	PE-298	ALS PIPE 13	W	A-L0304327-08					x										
100	05/07/03	PE-299	ALS PIPE 14	W	A-L0304327-09					x										

Table 1-5
Laboratory Sample
Tracking Log

	300 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS										RCRA	RCRA	RCRA	RCRA	
							PAHs	ETPH	PCBs	Metals	SVOCs	H2S CN							TCLP	
1	06/04/02	PE-301	CM1	CC	L0211540-01 L0212027-01					x									x	
2	10/22/02	PE-302	NWCP Silo Tank	CC	L0211540-02					x										
3	10/22/02	PE-303	ALS NK-1 Berm	CC	L0211540-03					x										
4	10/22/02	PE-304	ACL	CC	L0211540-04 L0212027-02					x									x	
5	11/06/02	PE-305	TR2 (trench)	CC	L0211540-05					x										
6	11/06/02	PE-306	CM2	CC	L0211540-06 L0212027-03					x									x	
7	11/06/02	PE-307	CM2	CC	L0211540-07					x										
8	11/06/02	PE-308	CM1	CC	L0211540-08					x										
9	11/06/02	PE-309	CM1	CC	L0211540-09					x										
10	11/06/02	PE-310	ALS Tank SR	CC	L0211540-10					x										
11	11/06/02	PE-311	ALS Tank NK/CR	CC	L0211540-11					x										
12	11/06/02	PE-312	FP	CC	L0211540-12 L0212027-04		x	x	x	x									x	
13	11/06/02	PE-313	ACS Tank VC/B1	CC	L0211540-13 L0212027-05		x	x	x	x		x							x	
14	11/06/02	PE-314	ACS Tank C-1/WT-4	CC	L0211540-14 L0212027-06		x	x	x	x		x							x	
15	11/06/02	PE-315	ACS SC3	CC	L0211540-15 L0212027-07		x	x	x	x		x							x	
16	11/06/02	PE-316	CS Tank EH	CC	L0211540-16					x										
17	11/06/02	PE-317	CS FP	CC	L0211540-17 L0212027-08					x									x	
18	11/06/02	PE-318	CS near ACS	CC	L0211540-18 L0212027-09					x									x	
19	11/06/02	PE-319	CS near TR2	CC	L0211540-19					x										
20	11/06/02	PE-320	CS O/H Door	CC	L0211540-20					x										
21	11/06/02	PE-321	ACL Valves	CC	L0211540-21 L0212027-10					x									x	
22	11/06/02	PE-322	ACL Pipes	CC	L0211540-22 L0212027-11					x									x	
23	11/06/02	PE-323	ALL Pipe Entry	CC	L0211540-23					x										
24	01/15/03	PE-324	Tank E-2/E-1	CC	L0300515-01					x										
25	01/15/03	PE-325	O/H CATWALK	CC	L0300515-02					x										
26	01/15/03	PE-326	Tank ER-2 SUMP	CC	L0300515-03					x										

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS										RCRA	RCRA	RCRA	RCRA	
							PAHs	ETPH	PCBs	Metals	SVOCs	H2S CN							TCLP	
27	01/15/03	PE-327	Tank VC-2 SUMP	CC	L0300515-04					x										
28	01/15/03	PE-328	Tank S-1	CC	L0300515-05					x										
29	01/15/03	PE-329	ERO(N)	CC	L0300515-06			x		x	x									
30	01/15/03	PE-330	Tank S-2(N)	CC	L0300515-07					x										
31	01/15/03	PE-331	ERO(S)	CC	L0300515-08			x		x	x									
32	01/15/03	PE-332	Tank D-1	CC	L0300515-09					x										
33	01/15/03	PE-333	Tank S-2(S)	CC	L0300515-10					x										
34	01/15/03	PE-334	Tank VC-2	CC	L0300515-11					x										
35	01/15/03	PE-335	Tank ER2 SUMP	CC	L0300515-12					x										
36	01/15/03	PE-336	SUMP 4	CC	L0300515-13					x										
37	01/15/03	PE-337	Tank E-1	CC	L0300515-14					x										
38	01/15/03	PE-338	CM1(N)	CC	L0300515-15					x										
39	01/15/03	PE-339	CM1(E)	CC	L0300515-16					x										
40	01/15/03	PE-340	CM1(W)	CC	L0300515-17					x										
41	01/15/03	PE-341	CM2(N)	CC	L0300515-18					x										
42	01/15/03	PE-342	CM2 Eyewash Sta.	CC	L0300515-19					x										
43	01/15/03	PE-343	Tank D-1(S)	CC	L0300515-20					x										
44	02/06/03	PE-344	CU/D/W (N)	CC	L0301634-01			x		x		x								
45	02/06/03	PE-345	CU/D/W (GRATE)	CC	L0301634-02			x		x		x								
46	02/06/03	PE-346	CU/D/W (S)	CC	L0301634-03			x		x		x								
47	02/07/03	PE-347	PCL DRAIN	CC	L0301634-04			x		x		x								

Table 1-5
Laboratory Sample
Tracking Log

	400 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Sample Serial ID	Source Location	Matrix	Laboratory Report No.		ANALYTICAL PARAMETERS ETPH		Metals *						RCRA	RCRA Corr	RCRA React	RCRA TCLP	HM
1	05/02/03		PE-401	Tank B-1	W	A-L0304140				X							X			
2	05/02/03		PE-402	Tank B-1	W	A-L0304140				X							X			
3	05/02/03		PE-403	Tank VC-1	W	A-L0304140				X										X
4	05/02/03		PE-404	Tank WT-4	W	A-L0304140				X										X
5	05/02/03		PE-405	Tank EH	W	A-L0304140				X										X
6	05/02/03		PE-406	Tank C-1	W	A-L0304140				X										X
7	05/02/03		PE-407	Tank WT-1	W	A-L0304140				X										X
8	05/02/03		PE-408	Tank WT-2	W	A-L0304140				X										X
9	05/02/03		PE-409	Tank WT-3	W	A-L0304140				X										
10	05/06/03		PE-410	Tank E-2	W	A-L0304326				X								X	X	
11	05/06/03		PE-411	Tank E-1	W	A-L0304326				X										
12	05/06/03		PE-412	Tank ER-2	W	A-L0304326				X								X	X	
13	05/06/03		PE-413	Tank S-2	W	A-L0304326				X										
14	05/06/03		PE-414	Tank S-1	W	A-L0304326				X										
15	05/06/03		PE-415	Tank VC-2	W	A-L0304326				X										
16	05/06/03		PE-416	Tank D-1	W	A-L0304326				X							X			
17	05/06/03		PE-417	Tank T-15	W	A-L0304326				X							X			
ACID TANK SUPPORT LEGS																				
18	08/03/06	418	WT-1A	Tank WT-1	W	E-L0611090				X								X		
19	08/03/06	419	WT-1B	Tank WT-1	W	E-L0611090		X		X										
20	08/03/06	420	WT-1A1	Tank WT-1	W	E-L0611090				X										
21	08/03/06	421	WT-1A2	Tank WT-1	W	E-L0611090				X										
22	08/03/06	422	WT-1B1	Tank WT-1	W	E-L0611090				X										
23	08/03/06	423	WT-1B2	Tank WT-1	W	E-L0611090				X										
24	08/03/06	424	WT-3A	Tank WT-3	W	E-L0611090				X								X		
25	08/03/06	425	WT-3B	Tank WT-3	W	E-L0611090		X		X										
26	08/03/06	426	WT-3A1	Tank WT-3	W	E-L0611090				X										
27	08/03/06	427	WT-3A2	Tank WT-3	W	E-L0611090				X										
28	08/03/06	428	WT-3B1	Tank WT-3	W	E-L0611090				X										
29	08/03/06	429	WT-3B2	Tank WT-3	W	E-L0611090				X										
30	08/03/06	430	WT-2A	Tank WT-2	W	E-L0611090				X								X		

Table 1-5
Laboratory Sample
Tracking Log

ENTRY No.	Sample Date	Sample Serial ID	Sample Serial ID	Source Location	Matrix	Laboratory Report No.		ANALYTICAL PARAMETERS								RCRA	RCRA	RCRA	RCRA	HM
								ETPH		Metals *							Corr	React	TCLP	
31	08/03/06	**431**	**WT-2B**	Tank WT-2	W	E-L0611090				X										
32	08/03/06	**432**	**WT-2A1**	Tank WT-2	W	E-L0611090				X										
33	08/03/06	**433**	**WT-2A2**	Tank WT-2	W	E-L0611090				X										
34	08/03/06	**434**	**WT-2B1**	Tank WT-2	W	E-L0611090				X										
35	08/03/06	**435**	**WT-2B2**	Tank WT-2	W	E-L0611090				X										
36	08/03/06	**436**	**C-1A**	Tank C-1	W	E-L0611090				X										
37	08/03/06	**437**	**C-1B**	Tank C-1	W	E-L0611090		X		X										
38	08/03/06	**438**	**C-1A1**	Tank C-1	W	E-L0611090				X										
39	08/03/06	**439**	**C-1A2**	Tank C-1	W	E-L0611090				X										
40	08/03/06	**440**	**C-1B1**	Tank C-1	W	E-L0611090				X										
41	08/03/06	**441**	**C-1B2**	Tank C-1	W	E-L0611090				X										

Table 1-5
Laboratory Sample
Tracking Log

	500 SERIES SAMPLE TRACKING MATRIX																		
ENTRY No.	Sample Date	Sample Serial ID	Sample Field ID	Source Location	Matrix	Laboratory Report No.	ANALYTICAL PARAMETERS ETPH		Metals		H2S CN				RCRA	RCRA Corr	RCRA	RCRA TCLP	Spec Cond.
1	12/5/2005	501	B1-S1 (0-12)	Alk Unload Sump	SubS	EAS05120063-01	X		X		X					X			X
2	12/5/2005	502	B2-S1 (0-6)	Alk Unload Sump	SubS	EAS05120063-02	X		X		X					X			X
3	12/5/2005	503	B3-S1 (0-12)	CUD Trench	SubS	EAS05120063-03	X		X		X					X			X
4	12/5/2005	504	B4-S1 (0-12)	CM2 Trench	SubS	EAS05120063-04	X		X		X					X			X
5	12/5/2005	505	B5-S1 (0-3)	CM1 Sump	SubS	EAS05120063-05	X		X		X					X			X
6	12/5/2005	506	B6-S1 (0-12)	ALS Floor	SubS	EAS05120063-06	X		X		X					X			X
7	12/5/2005	507	B7-S1 (0-12)	ALS Floor	SubS	EAS05120063-07	X		X		X					X			X
8	12/5/2005	508	B8-S1 (0-12)	ALS Sump	SubS	EAS05120063-08	X		X		X					X			X
9	12/5/2005	509	B9-S1 (0-8)	ALS Trench	SubS	EAS05120063-09	X		X		X					X			X
10	12/5/2005	510	B10-S1 (0-12)	FP Trench	SubS	EAS05120063-10	X		X		X					X			X
11	12/5/2005	511	B11-S1 (0-2)	ACS Trench	SubS	EAS05120063-11	X		X		X					X			X
12	12/5/2005	512	B12-S1 (0-2)	ACS Sump	SubS	EAS05120063-12	X		X		X					X			X
13	12/5/2005	513	B13-S1 (0-4)	ACS Sump	SubS	EAS05120063-13	X		X		X					X			X
14	12/5/2005	514	B14-S1 (0-12)	ACS Floor	SubS	EAS05120063-14	X		X		X					X			X
15	12/5/2005	515	B15-S1 (0-11)	ACS Floor	SubS	EAS05120063-15	X		X		X					X			X
16	12/5/2005	516	B16-S1 (0-12)	ACS Floor	SubS	EAS05120063-16	X		X		X					X			X
17	12/5/2005	517	B17- S2 (12-24)	ACL Pad	SubS	EAS05120063-17	X		X		X					X			X
18	12/5/2005	518	B18-S2 (6-18)	ALL Pad	SubS	EAS05120063-18	X		X		X					X			X

Table 1-5
Laboratory Sample
Tracking Log

Sample Source Location Code	
ACL	Acid Unloading Pad Area
ACS	Acid Storage Tank Area
ALL	Alkaline Unloading Pad Area
ALS	Alkaline Storage Tank Area
B1	Building #1 (Main)
B2	Building #2 Annex
B3	Building #3 Annex
CM1	Container Management Area #1
CM2	Container Management Area #2
CS	Central Aisle Area
CUDW	Container Unload/Decant/Wash Area
ERO	Eroded Channel Etch
FP	Filter Press Area
MR	Mechanical Room
NWCP	Northwest Concrete Pad - Lime Silo
OFC	Office Area
OHCAT	Overhead Catwalk in Alkaline Area
PCL	Laboratory Plant Control Laboratory
SC	Sump Containment
TR	Trench Drain
WTL	Waste Testing Laboratory
WWT	Wastewater Treatment Area

Sample Matrix Codes	
ACM	Asbestos Containing Material
BS	Bottom Sediment
CC	Concrete Chips
CT	Ceiling Tile
CW	Clean Water
FS	Floor Sweepings
H	Hoses
P	Pipes
PS	Pipe Sludge
RO	Run-Off/Run-On (Rainfall)
RW	Rinse Water (Final Decon)
SB	Soil Boring
SG	Sludge
SS	Surface Soil/Sediment
SubS	Sub-Slab Subsoil
TS	Tank Sludge
TB	Trip Blank
TW	Tank Water
W	Wipes (Gauze)
WW	Wash Water (Initial Decon)

N	**S**	**E**	**W**	Directional Locations
North	South	East	West	

Contract Laboratory Report Codes	
A	ALPHA ANALYTICAL LABS
E	EAS LABORATORIES
C	CLEAN HARBORS
P	PHOENIX
U	URS

Sample Series Pre-Fix Identification Codes	
PE	**Pure-Etch** closure period when sample collected.
EN	**Envirite** closure period when sample collected.

Sample Reference Codes